COUNTY COUNCIL OF CUMBERLAND

ANNUAL REPORT

ON THE

HEALTH SERVICES OF THE COUNTY

FOR THE YEAR 1957

W. H. P. MINTO, M.D., D.P.H.,
County Medical Officer.

INDEX

HEALTH COMMITTEE, 31st DECEMBER, 1957

Chairman: Mr. R. F. Dickinson.

Vice-Chairman: Mrs. E. G. Cain, O.B.E.

Banham, G.
Batey, Rev. H. T.
Bland, T. P.
Broadbent, C. W.
Douglas, J.
Herdman, J. F.
McCann, Rev. F. K.
McCarron, J. H.
McKeating, Mrs. B. O.
McPoland, Mrs. F.
Mitchell, J.
Nixon, W. G.
Powers, J. E.
Smith, Mrs. M.
Townsley, R.
Waddell, W.
Walsh, J.
Wilson, D. G.
Wright, T.
Young, T.

Ex-Officio Members:

Edmonds, C. — Chairman Education Committee.
Gaskarth, F. G. — Chairman Finance Committee.
Roberts, C. H. — Chairman of County Council.

External Members:

Braithwaite, Dr. J.
Brown, Mrs. J. Court.
Chalmers, Dr. R. W.
Curwen, Mrs. J. N. St.G.
Eves, A. J.
Faulds, Dr. J. S.
Ferguson, Dr. T. T.
Fisher, Miss M. C.
Fletcher, Dr. A. F.
Graham, Miss E. R.
Hasell, Mrs. G., O.B.E.
Hodgson, Mrs. H. L.
James, Mrs. E. L.
Jolly, Dr. G. M.
McCowan, R. D.

MEDICAL, DENTAL AND ANCILLIARY STAFF

County Medical Officer of Health and Principal School Medical Officer—

W. H. P. Minto, M.D., D.P.H.

Deputy County Medical Officer of Health and Deputy Principal School Medical Officer—

R. K. Machell, M.B., Ch.B., D.P.H.

Assistant County, School and District Medical Officers of Health—

J. L. Hunter, M.B., Ch.B., D.P.H., Senior Assistant County Medical Officer and Medical Officer of Health, Workington Borough.

J. N. Dobson, M.B., Ch.B., D.P.H., Medical Officer of Health Whitehaven Borough and Ennerdale Rural District.

J. R. Hassan, M.B., Ch.B., D.R.C.O.G. (part-time) Medical Officer of Health, Alston Rural District (also general practitioner).

I. S. Jones, M.R.C.S., L.R.C.P., D.P.H., Medical Officer of Health Wigton Rural District and Penrith Urban District.

J. Patterson, M.B., B.Ch., B.A.O., D.P.H., Medical Officer of Health Cockermouth Rural and Urban Districts and Keswick Urban District.

E. A. Perrott, M.D., B.S., D.P.H., Medical Officer of Health Millom Rural District.

K. J. Thomson, M.B., Ch.B., D P.H., Medical Officer of Health Border Rural District and Penrith Rural District.

Assistant County and School Medical Officers—

E. M. O. Campbell, M.B., Ch B., D.P.H., D.T.M. and H.

A. T. Harbison, M.B., B.Ch., B.A.O., D.P.H. (Resigned 30.4.57).

P. T. Regester, M.R.C.S., L.R.C.P., D.P.H.

C. H. Mair, L.R.C.P., L.R.C.S.(Ed.), D.P.H. (Commenced 9.7 57).

Principal Dental Officer—

A. C. S. Martin, L.D.S.

Assistant Dental Officers—

I. R. C. Crabb, L.D.S.

D. H. Hayes, L.D.S.

M. Hayes, B.D.S.

F. H. Jacobs, L.D.S.

D. C. Lamond, L.D.S.

R. B. Neal, M.B.E., L.D.S.

A. R. Peck, L.D.S.

A. M. Scott, L.D.S.

Mental Health—

Consultant Psychiatrists (Part-time) Seconded from Newcastle-upon-Tyne Regional Hospital Board.

J. Braithwaite, M.B., Ch.B., D.P.M.

J. R. Stuart, M.B., Ch.B., D.P.M.

T. T. Ferguson, L.R.C.P., L.R.C.S., L.R.F.P.S.

Mental Health Officer—

N. Froggatt.

Mental Health Workers—

Miss E. F. Hall.

Miss W. P. Buck, B.A.

Psychiatric Social Workers—

2 Part-time, 1 of whom is seconded from Newcastle-upon-Tyne Regional Hospital Board.

NURSING STAFF

Superintendent Nursing Officer—

Miss I. Mansbridge, S.R.N., S.C.M., Q.N., H.V.Cert.

Deputy Superintendent Nursing Officer—

Miss S. Keeler, S.R.N., S.C.M., Q.N., H.V.Cert.

Assistant Superintendent Nursing Officers—

Miss E. M. Main, S.R.N., R.S.C.N., S.C.M., Q.N., H.V.Cert. (resigned 11.11.57).

Mrs. A. Steele, S.R.N., S.C.M., Q.N., H.V.Cert.

Health Visitors	20
District Nurse/Midwives/Health Visitors	44
Midwives	12
District Nurse/Midwives	21
District Nurses	9

Orthopaedic Physiotherapists—

Miss J. M. Morris, M.C.S.P., M.E.

Miss J. A. Fraser, M.C.S.P., O.N.C.

Orthopist—

Mrs. A. M. Scott (nee Hodson), D.B.O.

Speech Therapists—

Miss D. Chapman, L.C.S.T. (resigned 31.3.57).

Mrs. J. M. Moss, L.C.S.T.

Miss A. M. Stevenson (commenced 2.9.57).

Mrs. S. E. Latimer, L.C.S.T. (26.4.57 — 25.7.57).

Administrative Officer—

W. Butcher.

PREFACE

To the Chairman and Members of the Cumberland County Council.

Mr. Chairman, My Lord, Ladies and Gentlemen,

I have the honour to present the Annual Report on the Health of the County of Cumberland for the year ended 31st December, 1957.

The health of the people in this county as far as one can judge from the vital statistics has remained generally satisfactory. The birth rate per thousand population has increased from 16.9 in 1956 to 17.9 (England and Wales 16.1). The crude death rate is 12.1 compared with 12.2 in 1956. The birth rate for 1957 is 5 8 in excess of the death rate. The infant mortality rate at 26.4 (England and Wales 23) is the lowest ever recorded in the county but the perinatal mortality rate (stillbirths plus deaths in the first week of life) which can be regarded as a more sensitive index of the adequacy of the maternity services is less satisfactory and suggests scope for improvement in the future. There were 21 deaths from respiratory tuberculosis and 186 new cases were notified. The three main causes of death are heart disease, vascular disease of the nervous system, and cancer all of which, with the important exceptions of coronory thrombosis and cancer of the lung, are diseases which, as a rule, affect people in the later decades of life.

At the national level, in 1957, the most important single event likely to affect the local health authority services in the future was the publication of the Royal Commission Report on the Law Relating to Mental Illness and Mental Deficiency. If the recommendations of the Royal Commission are to be implemented there will have to be not only an enormous expansion of the community services of local health authorities but also these authorities will have to provide a substantial amount of residential accommodation. From experience of other aspects of the health service it seems safe to say that the biggest problem in a county like Cumberland will lie in the recruitment of adequate staff and it is imperative that a start should be made now, within existing legislation, to expand our community services and to provide some residential accommodation in order to have at least a cadre for in-service training of staff for the future.

This year has brought some notable advances in preventive inoculation. In 1956 for the first time in Britain vaccination against poliomyelitis was offered to children born between 1947 and 1954, and certain selected groups of the registered children were vaccinated. 1957 saw two further extensions of that scheme; in the first the offer of vaccination was extended to children born in 1955 and in 1956 and the lists were re-opened to those who were born between 1954 and 1947 who had not previously registered; in the second extension were included the year groups 1946 to 1943, children born in 1957 when reaching the age of six months, expectant mothers, and certain other priority groups including general

practitioners, ambulance staffs and their families. To enable the vaccination programme for these groups to be completed by the early summer of 1958 the Ministry of Health decided to import, as a temporary measure, Salk vaccine manufactured in Canada and the United States to supplement supplies of the British vaccine which hitherto had been the only vaccine used in this country. The imported Salk vaccine would have to pass in this country the same safety and potency tests as the British vaccine. With regard to poliomyelitis vaccination, 1957 could be called "registration year" and 1958 "vaccination year", each operation adding its own particular strain to a part of the health department staff. This authority resolved for the first time, in 1957, to offer vaccination against whooping cough as part of the local health authority arrangements, and also to offer smallpox vaccination through the council's clinics. The only notable occurrence of infectious disease other than the usual exanthemata of childhood was a sharp epidemic of Asian type influenza in the late autumn. Full advantage was taken of a commercially produced vaccine issued by the Ministry of Health for the protection of certain groups of doctors, nurses and others who were specially exposed to infection and on whom an epidemic of this kind places an exceptionally heavy burden.

On 10th October, an accident occurred at the Windscale plutonium factory involving an emission of radioactive vapour consisting mainly of the iodine isotope which in addition to contaminating the surrounding countryside created, far beyond the Cumbrian boundaries, considerable public anxiety about nuclear radiation hazards in general, and the nuclear power programme in particular. As these events which gave us much food for thought and some new problems were the first of their kind ever to be reported in this country it is, I think, important to quote from the conclusions of the Medical Research Council Committee's report on the health and safety aspect — "After examining the various possibilities, we are satisfied that it is in the highest degree unlikely that any harm has been done to the health of anybody, whether a worker at the Windscale plant or a member of the general public." After the accident, the informal liaison which had existed between the council's officers and those of the United Kingdom Atomic Energy Authority was reinforced by the establishment of the Windscale Liaison Committee on which is represented all interests in the area. It is now clear that the events at Windscale produced no serious after-effects and they may well have done good by awakening a latent public anxiety about radiation hazards at a time when the peaceful uses of atomic energy are in the process of multiplying so that the need for continued safety measures, for more detailed interpretation of standards and for the transmission of adequate information to those concerned with the health of the public can be emphasised without interfering with future progress.

In this short preface I have tried to indicate the more important trends in the development of the local health authority service in Cumberland and I make

no apology for once again emphasising that if the best and most truly economic results are to be obtained, the establishment of the health department must be reviewed at intervals and brought up to date, and the provision of adequate in-service training for all grades of staff must be regarded as an absolute priority.

In conclusion I must express my gratitude to the Chairman and Members of the Health Committee for their continuing encouragement and interest, to my colleagues for the help they have given me, and above all to the staff of the health department for their loyal support.

I am, my Lord, Ladies and Gentlemen,

Your obedient Servant,

W. H. P. Minto,
County Medical Officer.

County Health Department,
11 Portland Square,
Carlisle.

June, 1958.

STATISTICAL AND SOCIAL CONDITIONS OF THE AREA

Area in acres of Administrative County — 967,054 acres.

Rateable Value (April 1st, 1957) — £1,856,902.

Estimated product of 1d. rate (April 1st, 1957) — £7,129.

Population (Census, 1951) — 217,453.

Population (1957 Mid-year estimate) — 217,600.

	Male	Female	Total	Urban Districts	Rural Districts	Admin. County	Eng'd & Wales
LIVE BIRTHS—							
Legitimate ...	1986	1777	3763				
Illegitimate ...	74	64	138				
	2060	1841	3901				
Birth rate per 1,000 population ...				18.8	17.3	17.9	16.1

STILL BIRTHS—							
Legitimate ...	46	49	95				
Illegitimate ...	3	4	7				
	49	53	102				
Stillbirth rate per 1,000 total births ...				28.0	23.6	25.5	22.4
DEATHS—							
All causes	1399	1241	2640				
Death rate per 1,000 population ...				12.2	12.1	12.1	11.5
DEATHS—							
From Pregnancy, Childbirth or Abortion	—	3	3				
Death rate per 1,000 total briths ...				—	—	0.75	0.47
DEATHS—							
All Infants under 1 year age.							
Legitimate ...	52	47	99				
Illegitimate ...	2	2	4				
	54	49	103				
Death rate all Infants per 1,000 live births				—	-	26.40	23.0
Legitimate Infants per 1,000 legitimate live births				—	—	26.31	—
Illegitimate Infants per 1,000 illegitimate live births				—	—	28.99	—
DEATHS FROM —							
Cancer—all forms	203	192	395				
Rate per 1,000 population				1.9	1.7	1.8	
DEATHS FROM —							
Leukaemia and Aleukaemia ...	7	8	15				
Cancer — Lung, Bronchus ...	48	7	55				
Cancer—Uterus	—	15	15				

COMPARATIVE VITAL STATISTICS

TABLE I.

Year	Estimated Mid-year Population	Births		Deaths			
				Under 1 year		All ages	
		No.	Rate	No.	Rate	No.	Rate
1921	216691	5325	24.5	437	82	2703	12.5
1922	218499	4863	22.3	485	100	3218	14.7
1923	219720	4647	21.1	344	74	2793	12.7
1924	221010	4496	20.3	327	72	2875	13.0
1925	220030	4177	18.9	357	85	2961	13.4
1926	217400	4337	19.9	313	72	2753	12.6
1927	216230	3719	17.2	303	81	2958	13.6
1928	210600	3782	17.9	237	62	2597	12.3
1929	208720	3703	17.7	275	74	2879	13.3
1930	208720	3610	17.2	214	59	2551	12.2
1931	205270	3589	17.4	261	72	2813	13.7
1932	205550	3432	16.7	257	75	2792	13.6
1933	204010	3223	15.8	229	71	2806	13.7
1934	202400	3295	16.3	209	64	2725	12.9
1935	201000	3318	16.5	202	61	2671	12.8
1936	199590	3165	15.9	185	58	2574	12.4
1937	196080	3131	16.0	192	61	2806	13.8
1938	194900	3092	15.9	184	59.5	2638	13.0
1939	198940	3086	15.9	173	55.6	2668	12.9
1940	209930	3293	15.6	245	73	3209	14.8
1941	216230	3463	16.0	197	56	2726	12.6
1942	211030	3551	16.8	203	57	2578	12.2
1943	206230	3589	17.4	173	48	2556	12.3
1944	198780	3914	19.7	192	49	2441	12.3
1945	195120	3484	17.4	162	48	2477	12.7
1946	200660	3911	19.5	182	47	2522	12.6
1947	202460	4446	22.0	187	42	2788	13 8
1948	210020	4073	19.4	149	37	2442	11.7
1949	212170	3920	18.5	133	34	2711	12 8
1950	215900	3806	17.6	134	35	2716	12.6
1951	214700	3681	17.1	124	34	2827	13.2
1952	215050	3714	17.3	119	32	2603	12 1
1953	216100	3608	16.7	97	27	2571	11.9
1954	216600	3533	16.4	98	27.6	2567	11.9
1955	216700	3556	16.4	101	28.4	2653	12.2
1956	217450	3679	16 9	112	30.4	2653	12.2
1957	217600	3901	17.9	103	26.4	2640	12.1

BIRTHS, DEATHS, INFANTILE MORTALITY AND POPULATION IN THE YEAR 1957 — TABLE II

District	BIRTHS						DEATHS			INFANTILE MORTALITY				
	Legitimate	Illegitimate	Total	Births per 1,000 of population (Crude)	Comparability Factor	Still-births	Total Deaths	Deaths per 1,000 of population (Crude)	Comparability Factor	Legitimate	Illegitimate	Total	Deaths of Infants under 1 year per 1,000 Live Births	Estimated mid-year population
URBAN DISTRICTS —														
Cockermouth	93	2	95	17.79	1.01	4	71	13.30	1.00	4	—	4	42.11	5340
Keswick	48	2	50	10.64	1.00	3	63	13.40	0.86	—	—	—	—	4700
Maryport	230	7	237	18.94	0.95	3	140	11.19	1.16	7	—	7	29.54	12510
Penrith	177	9	186	17.56	1.01	4	168	15.86	0.88	2	1	3	16.13	10590
Whitehaven	547	16	563	21.69	0.96	20	295	11.36	1.19	15	—	15	26.64	25960
Workington	519	14	533	18.25	0.97	14	344	11.78	1.19	13	1	14	26.27	29200
Aggregate	1614	50	1644	18.84	0.98	48	1081	12.24	1.11	41	2	43	25.84	88300
RURAL DISTRICTS —														
Alston	35	1	36	16.00	1.09	3	31	13.78	0.94	—	—	—	—	2250
Border	431	22	453	15.39	1.15	14	419	14.23	0.89	8	—	8	17.66	29440
Cockermouth	290	5	295	15.09	0.99	4	247	12.63	1.08	11	—	11	37.29	19550
Ennerdale	580	28	608	21.00	1.01	16	286	9.88	1.21	15	1	16	26.32	28950
Millom	235	14	249	17.39	1.04	7	162	11.31	1.11	7	1	8	32.13	14320
Penrith	172	3	175	15.22	1.03	2	136	11.83	1.00	4	—	4	22.86	11500
Wigton	406	15	421	18.08	1.02	8	278	11.94	1.06	13	—	13	30.88	23290
Aggregate	2149	88	2237	17.30	1.04	54	1559	12.06	1.06	58	2	60	26.82	129300
Administrative County	3763	138	3901	17.93	1.02	102	2640	12.13	1.07	99	4	103	26.40	217600

N.B.—Area Comparability Factors. In order to compare the statistics of birth and death rates in the county and county districts with the mortality and birth rates for England and Wales it is necessary to make a correction, to allow for the difference in age and sex distribution of the different populations. This is done by applying to the crude death rate and crude birth rate of the districts concerned "Area Comparability Factors" which have been estimated by the Registrar General and are shown on the table above.

CAUSES OF DEATH IN ADMINISTRATIVE AREAS

Cause of Death	Administrative County	Cockermouth U.D.	Keswick U.D.	Maryport U.D.	Penrith U.D.
All Causes	2640	71	63	140	168
1. Tuberculosis, Respiratory	21	1	—	4	—
2. Tuberculosis, other	3	—	1	—	—
3. Syphilitic Disease	5	—	—	—	—
4. Diphtheria	—	—	—	—	—
5. Whooping Cough	2	—	—	—	—
6. Meningococcal Infections	—	—	—	—	—
7. Acute Poliomyelitis	2	—	—	—	—
8. Measles	—	—	—	—	—
9. Other Infective and Parasitic Diseases	7	1	—	—	—
10. Malignant Neoplasm, Stomach	75	2	1	2	3
11. Malignant Neoplasm, Lung, Bronchus	55	—	1	5	3
12. Malignant Neoplasm, Breast	30	2	1	1	3
13. Malignant Neoplasm, Uterus	15	—	—	1	2
14. Other Malignant and Lymphatic Neoplasms ...	220	7	8	14	12
15. Leukaemia, Aleukaemia	15	—	—	3	—
16. Diabetes	21	1	1	3	2
17. Vascular Lesions of Nervous System	402	14	10	22	31
18. Coronary Disease, Angina	445	12	14	19	35
19. Hypertension with Heart Disease	55	—	3	3	9
20. Other Heart Disease	458	11	12	14	35
21. Other Circulatory Disease	84	1	—	10	2
22. Influenza	48	—	2	—	1
23. Pneumonia	72	3	1	6	3
24. Bronchitis	65	2	1	6	6
25. Other Diseases of Respiratory System	18	1	2	—	1
26. Ulcer of Stomach and Duodenum	22	1	1	1	—
27. Gastritis, Enteritis and Diarrhoea	9	—	1	1	—
28. Nephritis and Nephrosis	21	—	—	1	2
29. Hyperplasia of Prostate	18	1	—	—	—
30. Pregnancy, Childbirth and Abortion	3	—	—	—	—
31. Congenital Malformations	38	3	—	1	1
32. Other Defined and Ill-Defined Diseases ...	288	7	2	18	5
33. Motor Vehicle Accidents	26	—	—	—	1
34. All Other Accidents	79	—	1	4	11
35. Suicide	18	1	—	1	—
36. Homicide and Operations of War	—	—	—	—	—

TABLE III

Whitehaven M.B.	Workington M.B.	Aggregate of U.D.'s	Alston R.D.	Border R.D.	Cockermouth R.D.	Ennerdale R.D.	Millom R.D.	Penrith R.D.	Wigton R.D.	Aggregate of R.D.'s
295	344	1081	31	419	247	286	162	136	278	1559
2	3	10	1	4	—	4	2	—	—	11
1	—	2	—	—	—	1	—	—	—	1
—	—	—	—	4	—	—	1	—	—	5
—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	1	—	1	2
—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	1	—	—	—	1	—	2
—	—	—	—	—	—	—	—	—	—	—
—	1	2	—	—	2	2	—	—	1	5
9	9	26	1	6	8	16	7	2	9	49
4	16	29	—	6	2	11	2	2	3	26
4	6	17	1	4	2	—	2	1	3	13
2	5	10	—	—	2	2	—	1	—	5
20	29	90	2	37	18	21	17	8	27	130
—	3	6	—	2	4	—	2	—	1	9
2	4	13	—	3	2	1	—	—	2	8
59	50	186	3	57	32	42	21	22	39	216
39	63	182	2	55	52	49	26	23	56	263
12	3	30	1	7	3	6	2	1	5	25
30	51	153	9	124	41	20	22	37	52	305
9	7	29	1	20	9	9	8	5	3	55
5	6	14	1	7	8	5	6	—	7	34
7	10	30	3	7	11	13	3	1	4	42
6	10	31	1	8	5	9	—	4	7	34
2	—	6	—	3	1	4	1	—	3	12
4	4	11	1	—	—	—	3	3	4	11
1	—	3	—	1	2	1	1	—	1	6
1	4	8	—	5	1	5	—	—	2	13
—	2	3	—	3	—	3	4	3	2	15
—	—	—	—	—	—	2	1	—	—	3
6	4	15	—	4	4	5	3	2	5	23
50	41	123	4	28	28	40	20	13	32	165
4	3	8	—	7	2	3	3	1	2	18
15	8	39	—	13	6	10	3	2	6	40
1	2	5	—	3	2	2	1	4	1	13
—	—	—	—	—	—	—	—	—	—	—

SECTION 22.

CARE OF MOTHERS AND YOUNG CHILDREN

Maternal Mortality

I set out below the number of maternal deaths over the past seven years. When the total number of nineteen is studied some interesting facts emerge. In nine out of the nineteen cases the registered cause of death given is some form of thrombosis or embolism, five being pulmonary embolism and one massive air embolism associated with self attempted abortion. Toxic conditions of the heart, liver, or kidneys were the primary cause certified in four cases. There was a marked preponderance of women in Social Classes III, IV and V, and a remarkable paucity of women over the age of thirty-five or under the age of twenty-six.

1951	1952	1953	1954	1955	1956	1957	Total
1	1	5	5	1	3	3	19

The three deaths during 1957 give a **maternal mortality rate** of 0.75 compared with 0.47 for England and Wales. The respective figures for 1956 were Cumberland 0.79 and England and Wales 0.56.

Still Births, Neonatal Deaths and Infant Mortality

During the year 102 still births were registered, 80% of which were born in hospital giving a still birth rate per thousand total births of 25.5 compared with 22.4 for England and Wales. The causes of these still births in full time and premature babies are set out below.

	Full Time	Premature	Total
Congenital malformation	6	14	20
Toxaemia	6	4	10
Haemorrhage	3	5	8
Placental infarct	2	2	4
Prolapse of umbilical cord	5	—	5
Erythroblastosis	2	1	3
Hydrops foetalis	1	2	3
Maceration	2	2	4
Birth injury	2	1	3
Atelectasis	1	—	1
Umbilical cord around neck	2	1	3
Difficult labour with shoulder presentation	1	—	1
Difficult labour with impacted breech	1	—	1

Difficult labour with rupture of uterus	1	—	1
Immaturity	—	7	7
Intra-uterine death — no apparent cause	19	9	28
			102

The following table shows a comparison with previous years.

Year	No. of Still Births	No. of Still Births per 1.000 total Births	Rate England & Wales
1951	101	26.7	23.0
1952	94	25.0	22.7
1953	99	27.0	22.4
1954	106	29.8	23.5
1955	79	21.7	23.2
1956	111	29.3	23.0
1957	102	25.5	22.4

It is seen that both in Cumberland and England and Wales as a whole there has been little change over the past seven years, and it is this fact which has given rise to the interest in ante-natal care referred to later in this report. Deaths within the first week of life, the causation of which is similar, have likewise been virtually stationary for the past seven years. The combination of still births and deaths of infants within the first week are commonly referred to as perinatal deaths and plans were made during the year for co-operation in a nation-wide perinatal mortality survey to be undertaken between March and May, 1958. The frequency of hospitalisation of "high risk" mothers having still births is shown in the table on pages 20—21.

The following table sets out deaths of infants under the age of one year by commoner causes and by certain age groups.

Cause of Death	Age in Weeks 1	2-4	5-52	Total
Whooping Cough	—	1	1	2
Pneumonia	7	—	12	19
Congenital malformations	13	4	6	23
Injury at birth	12	—	—	12

Post-natal asphyxia, atelectasis	14		—	14
Haemolytic disease of newborn	2		—	2
Immaturity associated with diseases of early infancy	4	- -	1	5
*Immaturity	11	—	—	11
Other causes	3	5	7	15
Total	66	10	27	103

*An immature infant is a live born infant with a birth weight of 5 lbs. 8 ozs. or less, or with a period of gestation of less than 37 weeks.

In 1957 there was a decrease in the number of babies who died before reaching the first birthday—103 compared with 112 last year. This gives an infant mortality rate of 26.4 per 1,000 live births (30.4 in 1956); the rate for England and Wales is 23.0 (23.8 in 1956).

The survival rate of premature infants according to weight and to place of birth and nursing is set out in the table on pages 24—25.

It will be seen that of those born in hospital, 154 out of 186 premature births of all weights survived 28 days and 51 out of 57 of those born and nursed entirely at home. Last year's figures were respectively 154 out of 196 and 50 out of 53. The reduced chance of survival in babies of smaller birth weights is shown very clearly in births at home and hospital. It is also seen that 41 mothers of premature still born babies had been admitted to hospital for their confinements.

	1953	1954	1955	1956	1957
Total live and still births	3,707	3,659	3,635	3,790	4,002
Total of children born prematurely ...	213	209	213	266	265
Died within 28 days	32	32	39	52	39
Premature stillbirths	45	45	32	53	48
Non-premature still births	54	61	47	58	54
Total still births registered	99	106	79	111	102

It will be seen from the above table that a slight over-all decrease has occurred in all groups compared with last year.

HOSPITALISATION OF HIGH RISK MOTHERS 1954-5-6

Hospitalisation of High Risk Mothers 1954-5-6

	Age 30 or over at first confinement						Age 40 or over: 2nd or higher confinement					
	Cumberland			England and Wales			Cumberland			England and Wales		
	1954	1955	1956	1954	1955	1956	1954	1955	1956	1954	1955	1956
Live and still births ...	207	216	250	51,350	50,046	55,056	106	107	102	20,639	19,675	19,29
Live and still births in hospital ...	163	162	201	42,788	41,988	43,685	54	58	59	11,982	11,739	11,85
Percentage	78.74	75.00	80.40	83.33	83.90	79.35	50.94	54.20	57.84	58.06	59.66	61.4
Still births in hospital ...	3	12	10	1,688	1,652	1,780	2	3	7	683	689	67
Still births home and elsewhere	1	3	2	252	245	224	2	2	4	290	221	23

5th or higher confinement all ages						5th confinement or more before age 30					
Cumberland			England and Wales			Cumberland			England and Wales		
954	1955	1956	1954	1955	1956	1954	1955	1956	1954	1955	1956
342	309	349	52,774	53,342	55,433	88	69	81	10,642	11,230	12,097
126	114	170	20,552	21,506	22,865	30	18	37	3,574	3,919	4,263
36.84	36.89	48.71	38.94	40.32	41.25	34.09	26.08	45.68	33.58	34.90	35.24
6	8	17	1,157	1,230	1,245	—	—	2	140	175	165
3	4	2	650	601	604	—	—	—	84	87	110

Ante-Natal Care

In last year's report I drew attention to the importance of attacking the problem of toxaemia in pregnancy as the most likely means of reducing still births and neonatal deaths, as well as avoidable maternal death. As recommended in Ministry of Health Circular 9/56 the memorandum on this subject embodying the advice of the Standing Maternity and Midwifery Advisory Committee of the Central Health Services Council had been discussed in West Cumberland in October, 1956 by representatives of the local health authority, the Local Medical Committee, and the hospital service. Similar discussions are to take place during the coming year to cover the whole of the Special Area. The role of selection of cases for confinement in hospital was considered fully at this and subsequent meetings and last year I set out a table showing the extent to which Cumberland mothers in "high risk" categories with regard to age and parity were confined in hospitals in 1955 in comparison with the national figures. To these I have added this year the figures for 1954 and 1956 (see table). Details for 1957 are not available from the Registrar General at the time of writing.

While figures for these three years show, with three exceptions, percentages of "high risk" admissions numerically below similarly calculated figures for England and Wales as a whole, there is already ample published evidence that the problem of selection is a national one and in particular that more older multiparous women should be confined in hospital. It is encouraging to see from the table that in 1956 the percentages in three of the four groups are higher than the national average. An example of wide geographical variation in hospitalisation was shown by figures for the year 1950 of live, single, legitimate babies, of whom 70% were born in hospital in London and the South-East compared with 48% in the Northern Region.

In addition to medical need there are unavoidably cases who justify a hospital bed on grounds of social need and the transmission of information between local health authorities, general practitioners and hospitals is of the utmost necessity in assessing such cases. Reports on home conditions were requested by obstetricians in 55 such cases in 1957. The extent to which the home help service was utilised among expectant mothers is shown in the table on page 89. Equally important is the interchange of clinical information and quite apart from adequate ante-natal clinic records there is much to be said for the use of a personal maternity card retained by the patient, as has already been in use for some time in at least three of the larger cities in England.

Facilities for chest X-ray are made available to expectant mothers at mass radiography sessions and figures given by Dr. Morton in Table 2, pages 62—63 show that 111 expectant mothers in East Cumberland and 13 in West Cumberland took advantage of this opportunity. Details of dental care for expectant mothers are given on page 28 by the Senior Dental Officer who reports that 330 were examined and 224 required treatment. Miss Mansbridge comments on page 85 on the need for encouraging more women to take advantage of the opportunities for relaxation exercises and mothercraft classes.

PREMATURE LIVE AND STILL-BIRTHS

Premature Live Births

Weight at Birth	* Born in hospital			Born at home and nursed entirely at home			Born at home and transferred to hospital on or before 28th day		
	Total	Died within 24 hrs. of birth	Survived 28 days	Total	Died within 24 hrs. of birth	Survived 28 days	Total	Died within 24 hrs. of birth	Survived 28 days
(a) 3 lb. 4 ozs or less (1,500 gms. or less)	19	9	5	2	2	—	3	2	1
(b) Over 3 lb. 4 ozs. up to and including 4 lb. 6 ozs. (1.500 — 2,000 gms.) ...	35	3	27	5	2	3	8	1	6
(c) Over 4 lb. 6 ozs. up to and including 4 lb 15 ozs. (2 000 —2,250 gms.) ...	47	3	42	6	—	6	4	—	4
(d) Over 4 lb. 15 ozs. up to and including 5 lb 8 ozs. (2,250 —2,500 gms.) ...	85	2	80	44	. .	42	6	—	6
TOTALS	186	17	154	57	4	51	21	3	17

* The group under this heading includes cases born in one hospital and transferred to another.

PREMATURE STILL-BIRTHS

Born in nursing home and nursed entirely there			Born in nursing home and transferred to hospital on or before 28th day					
Total	Died within 24 hrs. of birth	Survived 28 days	Total	Died within 24 hrs. of birth	Survived 28 days	Born in hospital	Born at home	Born in nursing home
—	—	—	—	—	—	21	4	—
—	—	—	—	—	—	10	2	—
1	—	1	—	—	—	5	—	—
—	—	—	—	—	—	5	1	—
1	—	1	—	—	—	41	7	—

CHILD WELFARE CENTRES

No. of centres provided at end of year	No. of Child Welfare Sessions now held per month	No. of children who first attended a centre of this Local Health Authority during the year, and who at their first attendance were under 1 year of age	Number of children who attended during the year and who were born in			Total number of children who attended during the year	Number of attendances during the year made by children who at the date of attendance were			Total attendances during the year
			1957	1956	1955-52		Under 1 year	1 but Under 2	2 but Under 5	
18	69	1,754	1,310	1,051	1,056	3,417	10,874	2,081	1,497	14,452

Child Welfare Centre Attendances

The figures for child welfare centres are set out in the table. The number of children under one year of age who attended a welfare centre for the first time during the year rose from 1,458 in 1956 to 1,754 in 1957. The total attendances all ages were 14,452 (11,912 in 1956). The increase in attendances has been most marked under one year, but even among the older children there has been a noticeable increase.

Distribution of Welfare Foods

During the year ended December, 1957, 13 distribution centres, 2 sub-centres and 104 distribution points operated in the county. Eighty-three of the distribution points were operated by the Women's Voluntary Services personnel. No centres or points were closed during the year, but one re-opened at Mirehouse, Whitehaven, after being closed for two years and a new point was opened at Haverigg.

Total issues to beneficiaries and hospitals, etc.	National Dried Milk	Cod Liver Oil	Vitamins A. & D.	Orange Juice
1954 (half year)	74,348	11,782	2,169	45,478
1955	145,696	25,082	6,413	113,548
1956	151,101	23,669	7,274	124,212
1957	128,219	22,517	6,920	137,336

The reduction in issues of National Dried Milk is probably due to the increase in the price from 1st April, when the cost per tin went up from 10½d. to 2/4d.

Dental Services

The Principal Dental Officer makes the following comments on the dental service for 1957:—

The statistics given below in relation to pre-school children do not call for any remarks as they are approximately the same as previous years, and this is likely to continue unless some form of propaganda increases the demand. This is hardly advisable at the present time in view of shortage of staff. There is no doubt that there is need for a really comprehensive scheme of treatment for pre-school children, but it would be essential to have the staff available before embarking on what could easily disrupt the working of the already established school service. Of course, the other aspect of propaganda—to make parents aware of the part they should play in preventing decay of their children's teeth by both hygiene and diet—might pay dividends, but it has to be realised that a great deal of apathy is met when speaking

to parents. The one person whose word seems to carry weight with mothers is "the nurse" and it is surprising how much attention is paid to what she says, while at the same time she has access to many of the homes. It might be of great assistance if the nursing staff kept this more in mind. Talks on the subject have been given to nurses by the dental officers, but this could be further developed so that divergent points of view and consequent confusion would be avoided. It is important that they should also be conversant with the facilities available for dental advice and treatment at the county clinics and so be able to acquaint mothers accordingly.

Regarding expectant and nursing mothers, again the figures do not call for much comment. There is little doubt that the majority have treatment under the National Health Service and any suggestion of diverting such patients to clinics must be avoided as all that matters is that the person receives treatment. A certain number are attracted to the clinics when they discover that they have nothing to pay for dentures and apart from this the numbers would be still smaller. Propaganda in relation to this aspect of the service would need great wisdom lest it appear to the dental surgeons in private practice to be an attempt to attract their patients to the clinic. It is most important to avoid anything to disturb good relationships between the two branches of the profession, which must ever be dependent on one another to a certain extent.

Numbers Provided with Dental Care

	Examined	Needing Treatment	Treated	Made Dentally Fit
Expectant and Nursing mothers	330	224	289	148
Children under five	325	286	286	136

Forms of Dental Treatment Provided

	Scalings and Gum Treatment	Fillings	Silver Nitrate Treatment	Crowns or Inlays	Extractions	Gen. Anaesthetics	Dentures Provided. Full Upper or Lower	Partial Upper or Lower	Radiographs
Expectant and Nursing Mothers	18	184	—	1	1,338	112	173	44	25
Children under five	—	43	105	—	690	218	—	—	—

County Council Clinics

In 1957 the new clinic at the Valley Estate, Whitehaven, which also provides a flat for the health visitor for that district was completed and new welfare centre facilities were made available at Keswick and Seascale.

SECTION 23

MIDWIVES SERVICE

During the year 151 midwives notified their intention of practice. These notifications include 11 whole-time district midwives, 60 midwives working in the maternity department of hospitals in the administrative county, 7 midwives acting independently, and 73 district nurse midwives.

The number of domiciliary confinements undertaken during the year was 1,396.

Cases in which a doctor was booked and was present at the confinement	335
Cases in which a doctor was booked but was not present at the confinement	938
Cases in which a doctor was not booked	123
	1,396

In addition the domiciliary midwives attended the following cases which were delivered in hospital but discharged home before the fourteenth day of the puerperium 1,037

The following short table shows the position in respect of ante-natal and post-natal visits by midwives covering midwifery and maternity work.

Home visits	11,301
Attendances at nurses' clinics	5,928
	17,229

During the year midwives sent for medical help in domiciliary cases on 371 occasions.

Gas and Air Analgesia

There is only one midwife in the county who does not hold the gas and air certificate. During the year gas and air analgesia was employed in domiciliary midwifery or maternity by midwives to the extent of 1,022 cases. This figure shows a slight decrease from the previous year, and of course it has to be remembered that the figure of 1,022 out of 1,396 domiciliary confinements is not the end of the story, because in many cases classifiable as doctors' cases the practitioners themselves administer the analgesia. Oxygen resuscitators were used in 18 cases in 1957. There were 55 outfits for use in the county during the year.

SECTION 24

HEALTH VISITING

At the end of the year the staff of whole time health visitors amounted to 20, including 1 vacancy. In the rural areas much of the health visiting is undertaken by 44 district nurses, 13 of whom hold the Health Visitor's Certificate. The remainder continue to be employed under a temporary arrangement from year to year by dispensation from the Ministry of Health.

During the year the staff mentioned above paid 30,965 visits to children under 1 year of age and 36,331 visits to children aged 1-5 years.

SECTION 25

HOME NURSING

At 31st December, 1957, there were employed 60 Queen's or State Registered Nurses, 20 State Enrolled Assistant Nurses.

	No. of cases nursed	
Medical	5,444	
Surgical	1,935	
Tuberculosis	250	
Infectious Diseases	16	
Maternal complications	112	
Others	24	
	7,781	
Number of nursing visits paid	135,486	
Number of casual visits paid	6,493	
		141,979

The number of cases attended in 1957 was 7,781 and the total number of visits, excluding casual visits paid was 135,486. It is, I think, of interest to compare the home nursing figures for 1957 with those of 1953, 1954, 1955 and 1956.

No. of Cases Nursed

	1953	1954	1955	1956	1957
Medical	4,843	5,218	5,371	5,178	5,444
Surgical	3,130	2,772	2,575	2,316	1,935
Infectious Diseases ...	57	61	28	13	16
Tuberculosis	403	317	316	189	250

	1953	1954	1955	1956	1957
Maternal Complications ...	142	87	71	94	112
Others	32	27	30	35	24
	8,607	8,482	8,391	7,825	7,781

No. of Nursing Visits to above Cases

	1953	1954	1955	1956	1957
Medical	83,061	86,832	87,983	86,372	99,007
Surgical	40,651	35,852	35,962	29,907	29,265
Infectious Diseases ...	387	498	581	84	67
Tuberculosis	10,605	8,338	8,859	5,289	6,171
Maternal Complications ...	1,101	792	161	570	845
Others	285	168	212	715	131
Casual visits	4,943	5,005	4,782	5,771	6,493
	141,033	137,485	138,540	128,705	141,979
No. of nursing visits to patients over the age of 65 years	49,294	59,256	63,570	57,384	65,095
No. of nursing visits to children under the age of 5 years	8,676	7,259	4,883	4,068	4,338

The 1957 figures are broken down in more detail in the next table and the trend in the type of work which home nurses are now being called upon to do becomes clearer.

1. 45.80% that is nearly one-half of all nursing visits were made to persons over the age of 65 years, although the number of cases nursed was only 31.89%. An average of 25 visits were made to each such case.
2. The number of children nursed under 5 years of age accounted for 8.25% of the total with 3.1% of all nursing visits. An average number of 6.76 visits were made to each child.
3. To all other cases an average of 14.00 nursing visits were made. These visits, together with casual visits accounted for 51.1% of the total nursing visits.
4. The number of injections given accounted for 36.70% of all the nursing visits.

Home Nursing—Cases Nursed and Total Nursing Visits Paid

		Percentage of total cases nursed
No. of cases nursed over 65 years of age:—		
Acute ... ... 783)		
Chronic ... ... 1,536)	2,482 ...	31.89
Cancer ... ... 163)		
No. of children nursed under 5 years of age ...	641 ...	8.25
No. of cases of cancer nursed, age under 65 years	99 ...	1.27
Remaining cases	4,559 ...	58.59
Totals	7,781 ...	100%

		Percentage of total nursing visits paid.
Total number of nursing visits to persons over 65 years of age	65,095 ...	45.80
Total number of nursing visits to children under 5 years of age	4,338 ...	3.10
Injections:—		
Streptomycin ... ... 7,110)		
Insulin ... ... 11,448)		
Others ... ... 22,613)	51,923 ...	36.70
Penicillin ... ... 10,752)		
Remaining visits	14,130 ...	
Casual visits	6,493 ...	14.40
Totals	141,979 ...	100%

The home nursing figures for 1957 show a slight variation from the previous year. The total number of cases nursed decreased by 44, but the total number of nursing visits paid increased by 13,274. If the figures are studied closely it will be seen that a greater number of visits were paid to each case in all categories. The most significant increases in the number of visits are those to persons over the age of 65 years, an increase of 7,711 visits, and for the purpose of giving injections, an increase of 6,189 visits. The number of penicillin injections given was less, but injections of streptomycin, insulin and others all increased. The "other injections" listed include such drugs as mersalyl, cytamin, vitamin B injections and other newer drugs of the heart and blood groups. The number of cancer cases increased by 47, and 61 more tuberculous patients were given treatment at home. The number of cases of maternal complications increased by 18. This may be accounted for by the fact that although more women went into hospital to have their babies, more were discharged home before the 14th day, and some of these later developed a complication. The number of infectious diseases nursed remains low.

Special mention should be made of the satisfactory liaison that exists between the Superintendent Nursing Officer, the county health department and the hospital staffs in regard to the care of chronic sick and elderly patients, and of patients discharged from hospital requiring nursing treatment at home. In West Cumberland all patients placed on the chronic sick waiting list by general practitioners are referred to the Superintendent Nursing Officer by the secretary of the West Cumberland Hospital Management Committee. The district nurses are then asked to visit and submit a report on the home conditions, indicating whether the patient could reasonably be nursed and cared for at home, whether relatives are available and willing to help, and whether the services of a home help would enable the patient to stay at home. In some cases the district nurse and home help may be attending the patient already, but if the condition of the patient is such that hospital treatment is required, even the combination of all the domiciliary services may not meet the need. In a number of cases however, it has been possible for a patient to remain at home and a home help has been provided. The officers of the National Assistance Board have been very co-operative in providing for immediate material needs where necessary. In the east of the county all such cases are referred by the Almoners of the hospitals to the Superintendent Nursing Officer and the co-operation existing has been excellent.

To quote some figures, during 1957 the secretary of the West Cumberland Hospital Management Committee referred 145 cases before admission to hospital, and 68 cases were referred by the almoners in East Cumberland. Patients being discharged from hospital and requiring nursing treatment are referred direct to the district nurses by the ward sisters, who are supplied with a list of the district

nursing staff and their telephone numbers. All cases likely to require the services of a home help or other special assistance, are referred to the Superintendent Nursing Officer. These cases are visited either before discharge from hospital or immediately on their return home.

The most difficult aspect of trying to nurse a patient at home, where relatives are not available, lies in securing attention to the patient's needs in the late evening or during the night. In many cases the district nurse or home help have been able to attend to the patient's comfort in the evening, and in some members of the British Red Cross Society have rendered this service. During 1957, 390 cases of chronic sickness and the elderly were supplied with the services of a home help, together with 149 cases which included such conditions as heart disease and chest conditions. Without the services of a home help a good proportion of these cases would have had to be admitted to hospital.

No special arrangements are made for the nursing of sick children at home, but children discharged from hospital are referred to the county nursing service by the hospital almoners for special supervision, especially after treatment for burns and scalds.

HOUSING

At the end of 1957 the houses occupied by district nurse midwives were as follows:—

Houses built by the County Council with garage and surgery ...	15
Houses bought from the District Associations	8
Houses built by the North Eastern Housing Association which have been purchased by the County Council	6
Houses rented—North Eastern Housing Association	8
Local Housing Authorities	8

The Houses at Langwathby and Lamplugh were completed during the year. Further houses are contemplated at:—

Seascale	Hayton
Bransty	Scotby
Longtown	Brigham
Dearham	Greystoke
Kirkbride	Millom
Workington	

SECTION 26

IMMUNISATION AND VACCINATION

(a) Diphtheria Immunisation.

The number of children under school age immunised against diphtheria during the year was 2,599. School children receiving either a primary or reinforcing injection numbered 4,451. Reinforcing injections were given to 77 pre-school children. The total immunisations, primary or reinforcing during the year was 7,127. This total figure includes 2,433 reports of immunisation from general practitioners.

The following table shows the trend in respect of immunisation in Cumberland for the past 10 years.

1957	7,127
1956	5,221
1955	9,463
1954	6,880
1953	6,658
1952	8,915
1951	6,489
1950	7,161
1949	10,409
1948	7,235

At the end of 1957 the percentage figures for children regarded as fully immunised were:—

Under 5 years	46.5%
5-15 years	65.8%

No case of diphtheria has been notified in the county and there have been no notifications of diphtheria and no deaths from the disease in Cumberland since 1949.

(b) Whooping Cough Vaccination.

In 1956 the Medical Research Council's report on the risk of provoking paralytic poliomyelitis by immunisation against diphtheria and whooping cough was published, and Ministry of Health circular 8/57 set out the advice of the Central Health Services Council on the procedure recommended for immunisation against

diphtheria and whooping cough. This local health authority had not previously offered vaccination against whooping cough as part of the arrangements under Section 26 of the National Health Service Act. Circular 8/57 indicated that the Minister was now satisfied that an effective whooping cough vaccine could be produced and that the risk from the combined antigen did not justify its use by the local health authority. The Council decided to offer vaccination against whooping cough with the plain whooping cough vaccine, through the local health authority's service and steps were taken towards the end of 1957 to implement this decision. The County Medical Officer in consultation with the Local Medical Committee informed the general practitioners practising in Cumberland of the new arrangements to be made in the future for immunisation against diphtheria and against whooping cough.

(c) Smallpox Vaccination.

For some years the figures for infant vaccination against smallpox in the county have been unsatisfactory and during the year under review it was felt that the position might be improved if vaccination against this disease were offered through the council's clinics. The Minister of Health agreed a modification in the council's proposals under Section 26 which would allow vaccination against smallpox to be undertaken by the medical officers of the authority as well as by general practitioners.

In 1957, 1,813 reports of successful primary vaccinations were received from general practitioners and 370 reports of revaccinations. Of the 1,813 primary vaccinations, 1,545 were infants under 12 months. The percentage figure for successful primary infant vaccination in Cumberland is 41.5% (1956—30%). This figure is still far too low and it is generally held that 75% of infants should be vaccinated to give adequate protection to the population as a whole.

(d) Poliomyelitis Vaccination.

In 1956, vaccination against poliomyelitis was offered to children born between 1954 and 1947. From those children who were registered, those in certain age groups, selected under arrangements made by the Ministry of Health were vaccinated.

During 1957 in Cumberland vaccination was offered to all the children who had been registered in 1956. A continuous supply of the British vaccine was made available by the Ministry and vaccinations were not suspended, as previously, during the summer. The sequence of vaccination for registered children was left to the discretion of the authority and general medical practitioners were enabled to vaccinate their own registered child patients.

In May, the offer of vaccination was extended to children born in 1955 and 1956 and the lists were reopened for those who were born between 1954 and 1947 who had not been registered previously. In Cumberland the scheme was publicised by advertisement in the local press. Registration forms were made available at the council's clinics and offices, were issued by health visitors to children under school age, and through the schools to school children.

In November, there was a further extension of registration to include children born between 1946 and 1943, children born in 1957 when they reached the age of six months, expectant mothers, and certain other priority groups and their families, including general medical practitioners, ambulance staff and the staff of infectious disease hospitals. To enable this extended vaccination programme to be completed by the early summer of 1958, before the start of the official "poliomyelitis season", the Ministry of Health decided to import, as a temporary measure, Salk vaccine manufactured in Canada and in the United States to supplement supplies of the British vaccine which had hitherto been the only vaccine used in this country. The Cumberland registration arrangements for children continued on the same lines and, in addition, expectant mothers were able to register through the domiciliary midwives or the hospital ante-natal clinics. Registration of the other adult groups was secured by direct contact with the individuals concerned.

No Salk vaccine had been received in the county by the end of the year and the position at 31st December, 1957 is set out in the table. Early in 1958 large numbers of additional registration forms held up, presumably over the Christmas holiday period, were received.

Vaccination against Poliomyelitis—Position as at 31/12/57.

	Year of birth							
	1943	1944	1945	1946	1947	1948	1949	1950
Total Registered.	853	1,098	962	931	3,640	3,310	3,222	3,154
Total Vaccinated.					393	355	346	351
Total received one injection only					10	14	17	15
Total awaiting vaccination.	853	1,098	962	931	3,237	2,941	2,859	2,788

Year of birth								
1951	1952	1953	1954	1955	1956	1957	Expectant Mothers	TOTAL
3,068	2,891	2,538	2,418	2,367	2,376	150	18	32,996
289	344	298	284	3				2,663
14	10	16	12					108
2,765	2,537	2,224	2,122	2,364	2,376	150	18	30,225

(e) Influenza Vaccination.

In September, Ministry of Health circular 13/57 stated that vaccine designed to give protection against Asian type influenza was now being commercially produced. A mass vaccination scheme was not contemplated but vaccination was to be offered to certain groups of doctors, nurses and others, who were specially exposed to infection and on whom an epidemic would place an exceptionally heavy burden. The groups involved would be hospital staff, general practitioners and those members of the local health authority staff who care for sick in their own homes, such as nurses, midwives, home helps and ambulance staff. A course consisted of two injections of the vaccine at an interval of not less than three weeks. Vaccination was carried out independently through the hospital service for hospital staff. General practitioners and local health authority medical officers were supplied with vaccine through local authority arrangements. Apart from hospital staff, the following is a list of those people in Cumberland who were eligible for vaccination and who asked to be vaccinated.

General medical practitioners	59
Medical officers of local health authorities	11
District nurses	62
District midwives	9
School nurses	3
Health visitors	20
Administrative nursing staff	4
Home helps	137
Ambulance personnel	33
Others	2
	340

Vaccine was supplied to general practitioners to enable them to make their own arrangements for vaccination and vaccination for all the other groups listed above was undertaken by the local health authority staff. Vaccination commenced during October and was still being carried out at the end of the year. The final position was as follows:—

	Completed Vaccination	Had one injection only
General medical practitioners ...	59	—
Medical officers of local health authorities	3	1
District nurses	54	3
District midwives	7	1
School nurses	1	—
Health visitors	15	3
Administrative nursing staff	1	2
Home helps	78	17
Ambulance personnel	25	1
Others	3	—
	246	28

In spite of the small numbers, an attempt was made to assess the effectiveness or otherwise of the vacine. The epidemiology of Asian type influenza in Cumberland in the autumn of 1957 is described elsewhere in this report (page 106). When each individual received the first injection he was handed a survey card and asked to return the card to the County Medical Officer should any influenza-like illness be noted.

SURVEY CARD

CUMBERLAND COUNTY COUNCIL

Vaccination against Influenza—Survey

I was vaccinated against Influenza on .....

and ..... **I developed an Influenza** like

illness on ..... of which the characteristic symptoms were:—

PYREXIA ..... PHARYNGITIS .....

MALAISE ..... GASTRO-INTESTINAL .....

OTHERS (Specify) .....

.....

Name ..... Address .....

Date ....

Seventeen reports were received—five from individuals who had had one injection and who did not complete the course as a result of the illness; four from those who had had one injection, became ill and then had the second injection; and eight from those who developed an illness having had both injections. The symptoms reported by these 17 sufferers from what was probably influenza were as follows:—

Malaise	15
Pyrexia	12
Pharyngitis	9
Gastro-intestinal symptoms	2
Other symptoms (frequency of micturition)	1

The conclusion can be drawn that gastro-intestinal symptoms were not a feature of Asian type influenza following vaccination, and this observation is borne out by more detailed studies of influenza in the schools.

SECTION 27

AMBULANCE AND SITTING-CASE CAR SERVICE

There has been no change in the administration of the ambulance service which has been described in previous reports. The statistical table which follows compares the essential items—numbers of journeys, patients carried, total mileage, as these items affect the three sections of the transport service (ambulances, sitting-case cars, and hospital car service), with figures to 31st March, 1958.

For comparison, the figures for the year to 31st March, 1957, are also shown.

Two dual purpose vehicles were brought into service during the year, one at Workington and one at Whitehaven. At the end of the financial year the fleet consisted of 19 ambulances, 7 dual purpose vehicles, and 5 ambulances transferred to civil defence.

AMBULANCES — SUMMARY

	Ambulances			Sitting-Case Cars	
	Total No. of Journeys.	Total No. of Pats. carried.	Total Mileage.	Total No. of Journeys.	Total No. of Pats. carried.
Totals for year ended 31st March, 1957	7,806	26,032	241,429	15,061	45,155
Totals for year ended 31st March, 1958	9,600	22,950	251,710	15,207	45,393
Increase for year ended 31st March, 1958, compared with 1956/57 ...	1,794	—	10,281	146	238
Decrease for year ended 31st March, 1958, compared with 1956/57 ...	—	3,082	—	—	—

(Excluding journeys undertaken by other Local Health Authorities)

	Hospital Car Service			Summary of All Services		
Total Mileage.	Total No. of Journeys.	Total No. of Pats. carried.	Total Mileage.	Total No. of Journeys.	Total No. of Pats. carried.	Total Mileage.
388,234	1,388	3,350	71,650	24,255	74,537	701,313
391,874	907	2,276	47,669	25,714	*70,619	691,253
3,640	—	—	—	1,459	—	—
—	481	1,074	23,981	—	3,918	10,060

* Includes 1,241 patients conveyed to County Council Clinic, Occupation Centres, etc.

FINANCIAL POSITION—AMBULANCE SERVICE 1957/58

Note by County Treasurer

(a) The figures which follow relate solely to vehicles owned by the County Council or operated on their behalf.

(b) **Mileage and number of patients carried, viz:—**

Ambulances (including dual purpose vehicles)

Mileage ... ...
No. of patients carried ... ...

Sitting Case Cars

Mileage ... ...
No. of patients carried ... ...

Total

Mileage ... ...
No. of patients carried ... ...

(c) **Cost**—including administration and depreciation and interest on vehicles—subject to recoveries from other County and County Borough Councils and subject to Ministry grant under the National Health Service Acts:—

Ambulances (including dual purpose vehicles) ... ...
Sitting Case Cars ... ...
TOTAL ... ...

Points from the table are:—

1. **Expenditure**—in total, the amount increased by £3,752 i.e. from £53,090 (1956/57) to £56,842 (1957/58)

2. **Cost per mile**

1957/58 compared with 1956/57 ... ...

3. **Cost per patient carried**

1957/58 compared with 1956/57 ... ...

(d) **Number of vehicles at 31st March, 1958—all county owned**

19 ambulances and 7 dual purpose vehicles
5 ambulances transferred to Civil Defence

1957/58	1956/57
251,710	241,429 i.e. an increase of 10,281 miles
22,950	26,032 i.e. a decrease of 3,082 patients
439,543	459,884 i.e. a decrease of 20,341 miles
47,669	48,505 i.e. a decrease of 836 patients
691,253	701,313 i.e. a decrease of 10,060 miles
70,619	74,537 i.e. a decrease of 3,918 patients

1957/58 costs Amount	Per patient carried	Per mile	Per mile	1956/57 costs Per patient carried	Amount
£	s d	s d	s d	s d	£
29,370	25 7	2 4	2 2	20 0	26,025
27,472	11 6	1 3	1 2	11 2	27,065
£56,842	16 1	1 8	1 6	14 3	£53,090

Ambulances (including dual purpose vehicles)	**Sitting Case Cars**	**Whole Service**
Increase of 2d. to 2/4d.	Increase of 1d. to 1/3d.	Increase of 2d. to 1/8d.
Increase of 5/7d. to 25/7d.	Increase of 4d. to 11/6d.	Increase of 1/10d. to 16/1d.

Ambulance Section—Civil Defence

By the end of the year the total strength of the section, allowing for transfers and resignations, showed an overall increase of 50 volunteers, and the total instructor strength amounted to 26, of whom 20 had attended local qualifying courses, the remaining 6 having additionally qualified at Central Home Office courses, and in every area the recruitment strength was well above the peace-time establishment, and with only two exceptions exceeded the war-time establishment which is double. It has been possible therefore, with two exceptions, to provide one or more local instructors to each section — a highly desirable object from both the training and operational point of view.

As well as the two eliminating competitions and the County Rally, the section took part in large scale exercises with mobile defence columns of the army in Whitehaven, Workington and Millom, exercises which tested out the standard of training and operational control, reaction to raid conditions, and the ability to work in conjunction with army casualty collecting parties, with mobile first aid units of the National Hospital Service Reserve, and on one exercise with members of Industrial Civil Defence, and as on previous occasions tribute must be paid to the realism provided by qualified members of the Casualties Union. Where possible driving instruction has been given to volunteers best suited for the role of ambulance driver, and training in rescue from crashed aircraft has been placed on a realistic basis since the presentation of a grounded Gloster Meteor which has been made available to the corps by the Royal Air Force.

SECTION 28

PREVENTION OF ILLNESS, CARE AND AFTER CARE
TUBERCULOSIS

There has been no change in the administration of this service.

B.C.G. Vaccination of Contacts.

Contacts of tuberculosis cases and nurses received B.C.G. vaccination at the chest clinics in 1957 as follows:—

Contacts	902
Nurses	15

B.C.G. Vaccination of 13 year old children

The B.C.G. Vaccination scheme described in detail in the 1955 report continued. The work carried out during the year is shown in the following table:—

	1957	1956	1955
No. of children involved	3,165	2,890	2,802
Acceptance rate %	73	76	80
No. of children tested	2,276	2,142	2,190
Percentage of school population in respect of whom offer was made	72	74	78
No. giving positive reaction	697	755	667
Percentage of children positive	30.6	35.3	30.0
No. giving negative reaction	1,570	1,387	1,523
No. of negative children given B.C.G. ...	1,566	1,386	1,510

Tuberculosis Statistics

Deaths from respiratory tuberculosis in 1957 were 21. The 1956 figure at 18 was the lowest ever recorded in the county. There were 186 cases of respiratory tuberculosis notified during 1957 and this drop from 262 in 1956 does suggest that at last our efforts to reduce the incidence of tuberculosis in Cumberland are being more successful. Now is the time to redouble our search for the remaining sources of infection by further tuberculin surveys among infant schoolchildren, by more intensive contact tracing, and by the maintenance of a "live" register of infectious cases, and the more selective use of mass miniature radiography. As tuberculosis comes under control it is increasingly important for us to consider what can be done about the other diseases of the chest some of which, notably carcinoma of the lung and bronchiectasis, are causing us greater concern than formerly. For the sufferer from these diseases too there are better prospects both of prevention and of cure than in the past. Making due allowance where tuberculosis is concerned, for a change of emphasis, I would be bold enough to forecast a greater rather than a diminished need for an adequate service for diseases of the chest over the coming years. In 1958 the results of the long awaited mass miniature radiography survey in the industrial part of the Ennerdale Rural District should be available and these results will require most careful study in order to elicit not only the present facts regarding tuberculosis in that district, but in addition much useful data should become available about the incidence of other diseases of the chest discovered coincidentally during the survey.

As a preamble to the reports from the consultant chest physicians which follow, I set out certain figures for tuberculosis for the whole county.

Notifications

The following table shows the notifications in Cumberland for 1957 and the preceding years:—

Year	Pulmonary	Non-Pulmonary
1949	222	32
1950	231	48
1951	267	46
1952	259	45
1953	286	46
1954	262	57
1955	298	33
1956	262	27
1957	186	34

Deaths

Deaths from pulmonary tuberculosis for 1957 amounted to 21. Deaths from non-pulmonary tuberculosis amounted to 3.

The following table shows the deaths from pulmonary and non-pulmonary tuberculosis in Cumberland for 1957 and preceding years:—

Year	Pulmonary	Non-Pulmonary
1949	107	25
1950	101	15
1951	80	11
1952	43	9
1953	44	4
1954	26	3
1955	24	2
1956	18	3
1957	21	3

Distribution

The distribution of deaths from pulmonary tuberculosis by areas has been received from the Registrar General as follows:—

Urban Districts	Deaths	Death Rate
Cockermouth	1	.19
Keswick	Nil	Nil
Maryport	4	.32
Penrith	Nil	Nil
Whitehaven	2	.08
Workington	3	.1
Aggregate of Urban Districts	10	.11
Rural Districts		
Alston	1	.44
Border	4	.14
Cockermouth	Nil	Nil
Ennerdale	4	.14
Millom	2	.14

Penrith	Nil	Nil
Wigton	Nil	Nil
Aggregate of Rural Districts	11	.09
Total for administrative county	21	.1

It may be of interest to compare the deaths from pulmonary tuberculosis in East and West Cumberland for the past few years, and these figures are set out in the table which follows:—

Year	Total	East Cumberland Total	East Cumberland Percentage	West Cumberland Total	West Cumberland Percentage
1949	107	36	33.6%	71	66.4%
1950	101	22	21.8%	79	78.2%
1951	80	18	22.5%	62	77.5%
1952	43	7	16.3%	36	83.7%
1953	44	7	15.9%	37	84.1%
1954	26	4	15.4%	22	84.6%
1955	24	8	33.3%	16	66.6%
1956	18	7	38.9%	11	61.1%
1957	21	5	23.8%	16	76.2%

The percentages given in the above table represent the percentage proportion of the total deaths occurring in the county during these years, allocated between East and West Cumberland. The actual figures of deaths, apart from the percentages have, of course, to be read in conjunction with the population figures of the two areas of the county which are as follows:—

East Cumberland	81,770
West Cumberland	135,830
	217,600

These population figures are the Registrar General's estimated mid-1957 figures.

Expressed as a rate per 1,000 population the deaths from pulmonary tuberculosis during 1957 are as follows:—

East Cumberland	...	...	...	.06
West Cumberland	...	...	...	.12

EAST CUMBERLAND—DR. HUGH MORTON, CONSULTANT CHEST PHYSICIAN

Introduction

Statistics for 1957 show little material alteration from those of 1956. The volume of out-patient work continues to increase.

The increased number of notified cases of tuberculosis on the chest centre register is largely due to the greatly improved survival rate from tuberculosis. The number of new cases of tuberculosis is exactly the same as in 1956. The intense supervision of contacts, which we have continued during the year, is reflected in the increased number of such contacts diagnosed as tubercle. There is practically no waiting list for admission to hospital for cases of tuberculosis.

Chest disease other than tuberculosis continues to be responsible for a higher morbidity and a higher mortality in the community than tuberculosis.

Notifications.

In the East Cumberland area notifications for the pulmonary type of the disease remained at 125, the same as in 1956; notifications of non-pulmonary disease increased from 19 to 21. In the county of Cumberland Eastern area, the new pulmonary cases remained at 54, exactly the same as last year. Most of the new cases were in the first quarter of 1957.

The mass radiography unit allotted to the Special Area has continued in operation throughout the year. It remains a valuable case finding measure, and regular factory and public session surveys have continued. New ground will be broken in 1958 by an intensive community survey in the Ennerdale Rural District of the county, and arrangements are in hand to conduct a similar survey in the Botcherby and Harraby areas of the City of Carlisle early in 1959.

Table 1 gives the number of notifications throughout England and Wales for 1957 and the preceding five years:—

TABLE 1

Notifications in England and Wales

Year	Pulmonary	Non-pulmonary
1952	41,904	6,189
1953	40,917	5,629
1954	36,973	5,375
1955	34,209	4,554
1956	31,642	4,173
1957	29,310	3,807

Table 2 shows the notifications in East Cumberland for 1957 and the preceding five years:—

TABLE 2

Year	Pulmonary	Non-pulmonary
1952	79	20
1953	63	18
1954	66	19
1955	56	20
1956	54	10
1957	54	12

The sex and age distribution of new cases seen in 1957 are set out in Table 3, and apply to the Eastern Division of the county area, the figures in parenthesis being for the whole of the East Cumberland Hospital Management Committee area, including the City of Carlisle and North Westmorland.

TABLE 3

Respiratory

	Under 5	5-15	15-25	25-35	35-45	45-55	55-65	—65+
Males	1 (3)	1 (4)	1 (5)	3 (6)	7 (14)	1 (8)	6 (13)	6 (10)
Females	1 (1)	3 (3)	3 (11)	12 (28)	4 (9)	2 (5)	1 (2)	2 (3)

Non-Respiratory

Males	— (—)	1 (2)	2 (3)	— (—)	1 (2)	— (1)	— (—)	— (—)
Females	— (1)	— (—)	3 (3)	— (1)	1 (2)	2 (3)	1 (2)	1 (1)

Table 4 gives the pulmonary notifications for 1957, and these are further classified as to whether they are infectious or non-infectious, and also the extent of the disease they have on first examination. The figures in parenthesis are again for the whole of the East Cumberland Hospital Management Committee area.

TABLE 4

Respiratory	R.A. 1	R.A. 2	R.A. 3	R.B. 1	R.B. 2	R.B. 3
Males	5 (14)	10 (24)	3 (3)	2 (5)	3 (9)	3 (8)
Females	10 (24)	7 (11)	2 (7)	1 (1)	5 (11)	3 (8)
No. of above respiratory cases referred by M.M.R. unit						
Males	2 (3)	3 (7)	— (—)	— (2)	— (1)	1 (1)
Females	3 (8)	2 (3)	— (—)	— (—)	2 (5)	— (3)

Deaths

The number of people whose names were on the tuberculosis register for the Eastern Division of the county of Cumberland, and who have died during the year are set out in Table 5; the figures for 1952 relate to the number of deaths in the whole of the county.

TABLE 5

Year				Pulmonary	Non-pulmonary
1952	...	...	...	43	9
1953	...	...	...	7	1
1954	...	...	...	4	—
1955	...	...	...	13	1
1956	...	...	...	7	—
1957	...	...	...	9	1

Table 6 gives the number of deaths from tuberculosis in England and Wales for 1957 and the preceding five years:—

TABLE 6

Year							No. of Deaths
1952	...	...	...	...	...	...	9,335
1953	...	...	...	...	...	...	7,911
1954	...	...	...	...	...	...	7,069

1955	...	...	...	...	...	5,838
1956	...	...	...	...	...	5,368
1957	...	...	...	...	...	4,784

As indicated last year there are now comparatively few deaths from tuberculosis itself. The vast majority of our deaths have in fact been due to conditions other than tubercle, this is not surprising in view of the substantial percentage of new cases in the older age groups.

Chest Centre Statistics

Table 7 gives the number of cases of pulmonary and non-pulmonary tuberculosis on the East Cumberland county register for 1957. The figures in parenthesis in the grand total relate to the corresponding figures for 1956.

The number of cases with a positive sputum and therefore infectious during the last six months of 1957 has decreased by one. At the time of writing this report however, treatment with some of the newer drugs has been so successful that it is anticipated that this figure will show a marked reduction at the end of 1958.

Table 8 gives the statistical summary of the work done at the chest centre during the year.

TABLE 7.

Clinic Register as at the end of 1957—County of Cumberland—Eastern Division.

	Respiratory			Non-Respiratory			Totals			Grand Total
	M.	W.	Ch.	M.	W.	Ch.	M.	W.	Ch.	
Cases on Clinic Register as on 1st January, 1957.	252	249	14	19	59	16	271	308	30	609(568)
Additions to Register during 1957.	33	39	8	3	9	1	36	48	9	93 (83)
	285	288	22	22	68	17	307	356	39	702(651)
Removals from Register during 1957	19	27	2	2	8	2	21	35	4	60 (42)
Number of cases on Register on 31st December, 1957.	267	261	19	22	61	12	289	322	31	642(609)
Number known to have had a positive sputum within the preceding 6 months.	11	5	—	—	—	—	11	5	—	16 (17)

TABLE 8

Chest Centre Statistics

	East Cumberland		Carlisle City		North Westmorland		Total		Total figures for 1956	
	R.	N.R.	R.	N.R.	R.	N.R.	R.	N.R.		
1. No. of NEW cases seen:										
Adult male	342	2	357	1	58	1	757	4)		
Adult female	280	7	415	7	39	—	734	14)		
Male child	74	5	113	6	12	—	199	11)		
Female child	58	—	98	3	13	—	169	3)	1,891	2,021
2. No. of OLD cases seen:										
Adult male	1,054	19	1,404	15	167	13	2,625	47)		
Adult female	1,093	103	1,571	64	107	23	2,771	190)		
Male child	176	10	308	10	34	3	518	23)		
Female child	147	4	221	16	5	2	373	22)	6,569	5,333
3. No. of NEW contacts seen:										
Adult male	257	—	396	—	22	—	675	—)		
Adult female	337	—	426	—	32	—	795	—)		
Male child	277	—	362	—	26	—	665	—)		
Female child	255	—	338	—	32	—	625	—)	2,760	2,280
4. No. of OLD contacts seen:										
Adult male	40	—	120	—	1	—	161	—)		
Adult female	69	—	163	—	5	—	237	—)		
Male child	170	—	334	—	11	—	515	—)		
Female child	154	—	283	—	9	—	446	—)	1,359	1,069
5. No. of cases seen by physio-therapist:										
Adult male	373	—	942	—	2	—	1,317	—)		
Adult female	390	—	671	—	7	—	1,068	—)		
Male child	340	—	796	—	4	—	1.140	—)		
Female child	450	—	595	—	3	—	1,048	—)	4,573	2,313
6. No. of A.P. refills given ...	* 26	—	41	—	3	—	70	—	70	438
7. No. of P.P. refills given ...	498	—	1,168	—	53	—	1,719	—	1,719	2,556
8. No. of E.P. refills given ...	53	—	123	—	32	—	208	—	208	480
9. No. of screenings only ...	45	—	97	—	5	—	147	—	147	222
10. No. of aspirations ...	11	11	20	7	—	—	31	18	49	40
11. No. of other cases seen ...										292
	6,969	161	11,362	129	082	42	19,013	332		17,044
										19,345

* includes Blencathra O.P. refills—9

Contact Examinations

Contact work has been continued as in previous years, and Table 9 gives the total number of contacts diagnosed as tuberculous since 1952.

TABLE 9

	No. of new contacts seen			No. diagnosed as tuberculous		
	M.	W.	Ch.	M.	W.	Ch.
1952	132	264	266	—	2	—
1953	26	56	204	—	—	1
1954	172	239	350	2	4	3
1955	282	391	453	3	1	—
1956	233	263	424	—	1	3
1957	257	337	532	2	—	3

All Mantoux negative contacts continue to be offered B.C.G. vaccination, and it is worth noting that no contact who has been vaccinated with B.C.G. has developed active tuberculous disease since we first commenced vaccination in 1950.

Hospital Facilities and Waiting Lists

There is now no real waiting list for cases of tuberculosis. The demands on our beds have so diminished that we have been able to forfeit part of the Blencathra bed complement of 62 to the geriatric department.

Table 10 shows the number of tuberculosis cases from the Eastern Division of the county admitted to hospital for treatment during 1957 and also the average monthly bed occupancy by cases of tuberculosis from the whole of the East Cumberland Hospital Management Committee area. The figures in respect of the City General Hospital unit cover both cases of tuberculosis and non-tuberculous disease.

TABLE 10

Institution	Adults	Children	Average monthly bed occupancy
Blencathra	42	—	66.87
Longtown	23	—	24.74
Ormside Sanatorium	23	3	20.75
Chest Unit, City General Hospital ...	99	9	18.29

Treatment of tuberculosis was fully discussed in the 1956 report and has continued on identical lines. New drugs such as Pyrazinamide and Cycloserin have become available in this country during 1957, and are now being extensively used in combination with other drugs. It is too early yet to judge the long term prospects of these two additional drugs, but results so far obtained with Cycloserin particularly are indeed promising.

Rehabilitation Panels continue to be held monthly at the chest centre.

Mass Radiography

(Note: Figures given in brackets throughout the report relate to the corresponding figures for 1956).

During 1956 the unit spent slightly more time in West Cumberland than in East Cumberland. Once again owing to technical staff shortage we had to close the unit for the month of August. During the severe influenzal epidemic in the latter part of the year we had unfortunately to close the unit for a period of three weeks because of illness amongst the staff. Had the staff remained fit, however, it is very doubtful whether our surveys during these three weeks would have borne results as there was very considerable morbidity from influenza in the factories and workshops we had arranged to survey.

Groups examined

In addition to carrying out surveys at works and factories, surveys of the general public were carried out on 37 occasions. 2,847 (2,675) contact cases were x-rayed; 1,570 from the East Cumberland area, and 1,277 from West Cumberland.

Facilities for x-ray examination were again made available to school children but each child is now limited to one examination before the age of 15, and as before such mass radiography examinations were complementary to the Mantoux testing and vaccination scheme of the local authorities. 7,851 (8,775) school children passed through the unit.

Sessions were held for members of the general public in 33 (24) towns and villages in the Special Area and 19,322 (20,397) persons passed through the unit.

The full co-operation of the general practitioners in the area was again invited as in previous years. The fact that both East and West Cumberland have now good chest centre facilities greatly limits the usefulness of the mass radiography unit as far as the general practitioners are concerned, and this is not surprising in a scattered area such as we have. General practitioners know that they can refer cases directly to the chest centres at any time and indeed of the total number

of new cases of tuberculosis seen during the year the vast majority were seen at the request of the patient's own doctor.

Results

44,073 (48,420) persons were examined by the unit during the year. These included 1,189 (1,223) inmates of Dovenby Hall and Garlands Hospitals. Excluding the mental patients, 42,884 (47,197) persons were examined.

Number recalled for full sized x-ray film 2,095—4.75% of total examined (2,236—4.62%)

Number referred for clinical examination 542—1.23% of total examined (550—1.14%)

Number failing to attend for full sized film 154—7.35% of those recalled (170—7.60%)

In the East Cumberland area, all but 3 of those mass radiography recall non-attenders accepted further appointments at the chest centre.

TABLE 1

Abnormalities Revealed	No. of cases found	Percentage of total examined
(1) Non-Tuberculous conditions		
(a) Bronchiectasis	42 (52)	.10 (.10)
(b) Pneumoconiosis	94 (64)	.21 (.13)
(c) Neoplasms	11 (10)	.02 (.02)
(d) Cardiovascular conditions ...	440 (413)	1.00 (.82)
(e) Miscellaneous	777 (822)	1.76 (1.69)
(2) Pulmonary tuberculosis		
(a) Active	53 (82)	.12 (.17)
(b) Inactive	537 (596)	1.22 (1.23)
(c) Active (previously known) ...	8 (20)	.02 (.04)

Table 2 gives a detailed analysis of the work of the unit divided into East and West Cumberland areas.

TABLE 2

EAST CUMBERLAND

Miniature Films	Large Films	Clinical Exams.	Active T.B.	Inactive T.B.	Bronchiectasis	Neoplasms	Pneumoconiosis	Cardiac Conditions	Source of Examination
101	22	7	—	2	1	—	—	6	Doctors' cases
111	9	2	—	3	—	—	—	1	Ante-natal cases
1,570	63	14	—	21	—	—	—	28	Contact cases
4,392	122	19	3	11	2	—	—	2	Scholars
277	9	1	—	7	—	—	—	—	School Staff
11 138	648	181	21	149	9	4	1	221	General public
5,815	311	86	5	76	4	3	—	82	Surveys
859	61	29	8	43	2	—	1	28	Mentally defective patients
24,263	1,245	339	37	312	18	7	2	368	TOTALS

WEST CUMBERLAND

Miniature Films	Large Films	Clinical Exams.	Active T.B.	Inactive T.B.	Bronchiectasis	Neoplasms	Pneumoconiosis	Cardiac Conditions
138	32	9	—	6	2	—	2	2
13	—	—	—	—	—	—	—	—
1,277	91	22	4	42	2	—	12	8
3,459	98	22	3	26	3	—	—	1
—	—	—	—	—	—	—	—	—
8,184	421	112	13	103	13	4	75	44
6,409	194	35	4	43	3	—	3	12
330	14	3	—	6	1	—	—	5
19,810	850	203	24	226	24	4	92	72

Disposal

1. Pulmonary Tuberculosis.

There is no waiting list for admission to hospital or sanatorium of new cases of tuberculosis. Now that we have effective medical and surgical therapy, pulmonary tuberculosis invariably carries an excellent prognosis. Naturally the return to work of the patient is earlier in cases where the diagnosis has been made early. Each month's delay means a slightly longer period of time off work.

Table 3 refers to East Cumberland and gives the total number of cases discovered in the East Cumberland area last year with the percentage of positive sputum cases discovered by mass radiography examination. This table is introduced again to emphasise early diagnosis. If every person consulted their doctor or had an x-ray examination when feeling ill, we should scarcely get such a high percentage of sputum positive cases coming through the mass radiography unit for the first time.

TABLE 3

Year	Total number of new cases of pulmonary tuberculosis	Total number with positive sputum	Percentage of new cases with positive sputum	Percentage positive sputum cases found by M.M.R.
1951	148	57	39%	23%
1952	221	91	41%	22%
1953	140	45	32%	20%
1954	170	56	33%	13%
1955	139	42	30%	21%
1956	125	39	31%	18%
1957	125	42	34%	29%

Table 4 again relates solely to the East Cumberland area and shows the total number of new cases discovered in 1957, and the proportion of these which were referred directly by the mass radiography unit.

All cases are further classified according to the extent of their disease and also whether the sputum was negative or positive.

TABLE 4

(R.A. cases- negative: R.B. cases- positive)

East Cumberland	R.A. 1	R.A. 2	R.A. 3	R.B. 1	R.B. 2	R B. 3
Respiratory						
Males	5(14)	10(9)	3(4)	2(—)	3(2)	3(3)
Females	10(10)	9(4)	2(2)	1(1)	5(3)	3(2)
No. of above cases referred by M.M.R.						
Males	2(6)	3(5)	—(1)	—(—)	—(1)	1(—)
Females	3(5)	2(1)	—(—)	—(—)	2(1)	—(—)
Carlisle City						
Respiratory						
Males	9(17)	12(9)	—(3)	3(1)	6(6)	5(8)
Females	14(6)	4(5)	4(2)	—(—)	6(1)	5(5)
No. of above cases referred by M.M.R.						
Males	1(7)	4(3)	—(1)	2(1)	1(2)	—(2)
Females	5(1)	1(1)	—(—)	—(—)	3(—)	3(—)
North Westmorland						
Respiratory						
Males	1(1)	2(—)	—(—)	—(—)	—(2)	—(3)
Females	—(—)	—(—)	1(—)	—(—)	—(1)	—(1)
No. of above cases referred by M.M.R.						
Males	—(1)	—(—)	—(—)	—(—)	—(—)	—(—)
Females	—(—)	—(—)	—(—)	—(—)	—(—)	—(—)

2. Bronchiectasis

The treatment of bronchiectasis is largely medical. All such cases are investigated without delay and there is no delay in giving treatment. It is anticipated that the number of such cases requiring surgery will steadily diminish in the future.

3. Pulmonary neoplasm

There is no delay in investigation here. Every case suspected of being a pulmonary neoplasm is bronchoscoped within a fortnight and cases considered

fit for surgery are almost immediately admitted to Shotley Bridge Hospital with a view to surgery.

4. Pneumoconiosis

Investigation of pneumoconiosis continues to take up an appreciable time in the West Cumberland area and is important in the general scheme for preventing the spread of tuberculosis.

5. Cardiovascular conditions

There is a steadily increasing number of such conditions discovered on mass radiography surveys and practically all of these are further investigated at the chest centres. Most serious pulmonary diseases cause some cardiac embarrassment. Cardiac disease itself, either right heart failure or arterio-sclerotic coronary disease is poorly tolerated by persons with poor respiratory reserve, notably those with emphysema. Although the heart strain in such cases usually progresses, timely diagnosis and therapeutic measures will usually prolong life and entail reasonable comfort for the patient.

Cases of primary cardiac disease are also investigated fully. A small number of congenital heart defects have been discovered and full co-operation is maintained with other hospital departments, notably the thoracic major surgery clinic in their investigation and treatment.

6. Other conditions

Many other conditions are discovered on mass radiography examination and referred to the chest centres for further investigation and treatment. Full co-operation is maintained with other departments in the hospital service and in general every effort is made to secure a correct diagnosis and arrange for treatment.

Comments

There has been a considerable downward trend in the number of newly discovered cases of pulmonary tuberculosis during the last 10 years, and it would appear that this trend has now been halted, and it is likely that the figures for 1958 will approximate those of 1957. This is not peculiar to the Special Area, but is common to many areas in England and Wales and to other countries as well. It is clear therefore that the routine mass radiography examination of factory and workshop employees and general public, valuable as these examinations still remain in this area, are no longer as productive or as economic. It is essential, therefore, that the work of a mass radiography service and the situation in an area such as

ours must be constantly reviewed. Every effort must be made to survey the population groups which might be likely to return a higher incidence of the disease. At the same time our efforts should not be confined to discovering tuberculosis alone, but should embrace other diseases such as pulmonary cancer, bronchiectasis, heart disease and other pulmonary conditions. Our efforts should be intensified where there is a substantial incidence of pulmonary disease in the population or where the incidence is tending to increase.

The Ennerdale Rural District has for many years been recognised as one of the black spots in the county of Cumberland so far as tuberculosis is concerned, and at the time of writing this report an intensive street by street community survey of this area is being carried out. In addition to a high incidence of tuberculosis in this area in the past there has also been the added complication of a high incidence of pneumoconiosis in the iron ore workers. Such a survey as this has entailed very considerable preparation and consultation, not only with the local authorities but with all bodies official and otherwise whom it was felt could make the survey successful. We of the mass radiography unit have been greatly encouraged by the co-operation we have obtained from these bodies in this survey, and we hope that all our combined efforts will result in a very good response from the general public.

A similar survey is planned for the Harraby/Botcherby area in the city of Carlisle early in 1959, and similar consultations will shortly take place with the local authorities and other bodies concerning this survey. We have felt that the incidence of tuberculosis in Carlisle has been the highest in the whole of the Special Area since 1950 and experience at the chest centre has suggested that a survey in these two areas of the ctiy might be productive.

In addition to these larger community surveys the mass radiography unit will be directed throughout the area to other centres where chest centre information suggests that there is a considerable increase in the incidence of tuberculosis, or where local conditions have so altered that some increase might be expected. An example is Brampton and Spadeadam where there has been a small but definite increase in tuberculosis and where there is a large new floating population.

At the same time we shall continue to press on with our regular mass radiography surveys.

The only hope in pulmonary cancer is to secure an early diagnosis and this means that everyone should try to avail themselves of an annual x-ray examination at least.

It is hoped that a static unit will be provided at the mass radiography base in Carlisle so that the mobile van can be used to its fullest extent in carrying

out surveys throughout the area. Such a static unit would help considerably not only in improved facilities being available to the general practitioners in Carlisle and district for sending their cases, but it would make easier contact investigations for known cases of tuberculosis. It would also save time by making the factory surveys every two years instead of annually after first arranging that all new employees of these factories should come to the static unit before starting work.

Contact examinations are a very important part of the work of the mass radiography unit. Indeed, were it not for the unit we would be unable to cope with these examinations with our limited chest centre facilities.

Of all diseases other than tuberculosis, pulmonary carcinoma is the biggest and most serious problem. An appreciable number of cases are discovered early by our mass radiography unit, but the overall problem in this area shows a steady increase, e.g. in the East Cumberland area the number of cases of pulmonary cancer rose last year by almost 30%. There is still an appreciable incidence of bronchiectasis in this area and at the present time there are 287 cases in East Cumberland under active treatment. It is anticipated that now that antibiotics are in general use this disease will decline. In the whole area there is a considerable incidence in lung/heart disease — bronchitis and emphysema are possibly the two commonest diseases of the older age groups of our community, and the investigation of these cases has been very worth while.

It is necessary to comment briefly on the radiation hazard which has received widespread publicity both in the medical and in the lay press. The danger from x-ray examination is very small indeed and the amount of radiation received is only a very small part of the total radiation which comes to us naturally out of the air and artificially from man-made sources. It is imperative that we should take every step we can to keep exposure to radiation activity from any source to a minimum. For these purposes every necessary protection is being provided on the mass radiography unit which will be effective not only to members of the public but to the team working the unit. One must keep a balanced view of this danger and remember that without x-ray examinations we would be unable to detect diseases and especially tuberculosis at its earliest stage.

For a large part of 1957 we suffered from an acute shortage of radiographers and as a result we have arranged to close the unit for the month of August during the current year again. Not only does this allow of staff leave but it is necessary for the Ministry of Supply to overhaul and repair unit vehicles. New arrangements have been made by the Ministry of Health and instead of the unit being overhauled locally our unit like others in the North of England, has now to be overhauled annually at Blackpool.

I am happy to be able to say that our technical staff is now at full strength.

Acknowledgments

Once again it is pleasure to acknowledge the valuable help received in the chest centre work as a whole from the staff of the County Public Health Department, and particularly I would express my sincere thanks to Dr. Minto, the County Medical Officer for his continued valuable co-operation."

West Cumberland—Dr. R. Hambridge, Consultant Chest Physician

" During the year the Chest Clinic services have continued on very much the same level of work as in previous years.

On 17th January, 1957, Homewood Annexe of Whitehaven Hospital was opened for the treatment of tuberculous cases: it provides 41 beds in small ward units. Bed usage has been adjusted to the fluctuating demands of men and women from month to month, but on the whole a slightly higher proportion of male beds has been required than of females. Extremely limited use has been made of beds in more remote sanatoria and by the end of 1957 only five West Cumberland patients were accommodated in sanatoria outside West Cumberland. The rate of self-discharge from local institutions for treatment was 9%.

It will be seen from the ensuing details that the observed incidence of tuberculosis has decreased: the decrease appears to have occurred predominantly in the young and middle aged adult population, much the same number of children and elderly people still contracting the disease as in previous years. Whilst there has been a fall in the number of notifiable cases, the progressive improvement in the mortality rate noted since 1950 was halted in 1957. The actual number of patients now dying from tuberculosis is relatively small, which undoubtedly contributes to fluctuations in a rate which is expressed per thousand of population, but the encouraging trend noted up to 1956, in which mortality in this area fell to a level below the average for the United Kingdom, has not continued during this year. This matter is dealt with a little more fully under the paragraph relating to deaths.

New Cases

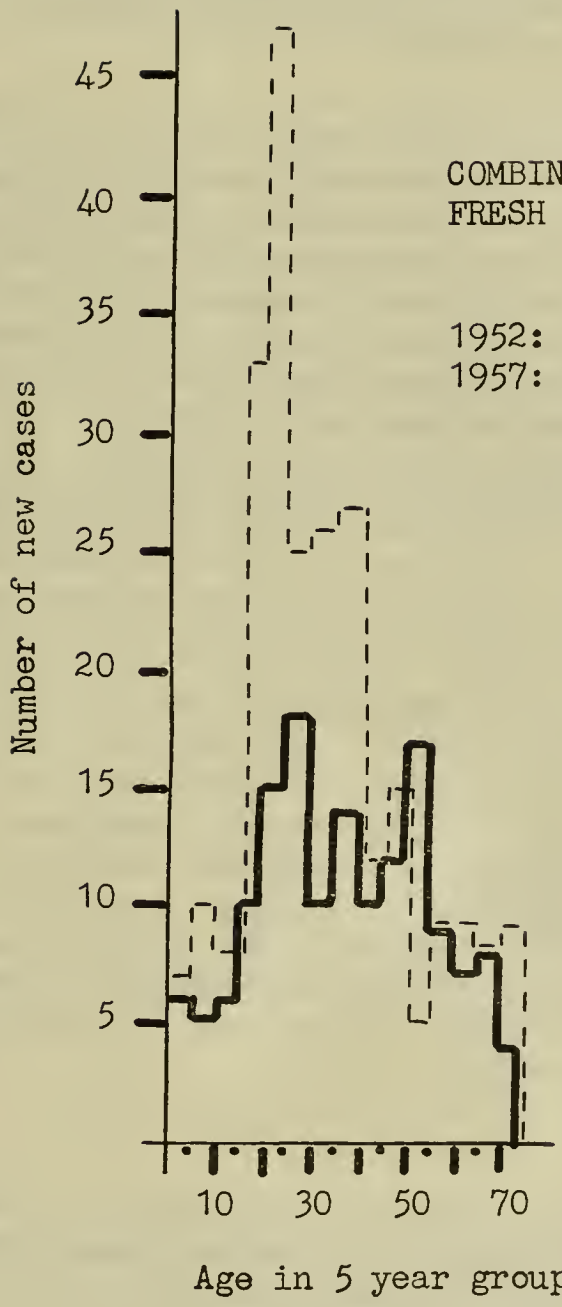
New cases of tuberculosis identified in the area in 1957 total 151: of these 120 were notified as respiratory cases and 31 as non-respiratory cases. As in previous years, the number of males is in excess of the females whilst the number of children diagnosed (17 cases) is practically identical with the previous year (16 cases).

It will be seen from the following table that most of the decrease in notified cases has occurred in respiratory forms, the number of non-respiratory types of disease being practically constant.

Year	Respiratory	Non-respiratory	Total
1953	262	19	281
1954	245	32	277
1955	193	21	214
1956	169	35	204
1957	120	31	151

The decrease in diagnosed cases is reflected in the annual case rate for 1957 of 1.1/1,000 population for all forms of tuberculosis.

An analysis of the new cases by age groups is shown in the accompanying graph, from which it can be seen that whilst there has been a small welcome decrease in the amount of disease in children below the age of ten, the greatest reduction has occurred in the adult population of age groups 15-50 years inclusive, Compared with the incidence of 1952 there has been a quite remarkable change in the health of the population in this age bracket.



COMBINED GRAPH OF
FRESH NOTIFICATIONS

1952: Broken line
1957: Continuous line

Tuberculosis Register

The number of cases remaining on the tuberculosis register at the 31st December, 1957, is 1,514 respiratory and 175 non-respiratory, totalling 1,689, which represents a rate of 12.4 per thousand population of known cases—again a slightly higher figure than in 1956 (12.0 per thousand).

An analysis of the tuberculosis register shows that of the cases taken on to the register before 1957, 695 were assessed quiescent during this year, 168 had active disease still, and 117 had disease of doubtful activity. Three hundred and sixty cases, previously entered on the register, were found after investigation not to have active disease. Of the new cases diagnosed during 1957, as mentioned previously, 151 cases of active disease were notified: 37 additional cases were found not to have active disease. From these figures it is apparent that approximately 20% of the cases on the tuberculosis register prior to the current year still have active disease and that 80% of old cases have been rendered quiescent.

As in previous years, infectious cases at diagnosis occurred predominantly amongst men. Whilst 16% of the new female cases were shown to be infectious at diagnosis, 22% of males were so. The largest proportion of infectious cases was found in the Ennerdale district, followed by Whitehaven and Maryport in that order.

The estimated population of children aged 5-14 years in West Cumberland is approximately 22,000, from which arose 17 new cases of tuberculous disease, mainly of respiratory forms (15). The case rate for this group of the population is relatively high at 0.8 per thousand and indicates still a considerable amount of infection circulating in the adult community responsible for infecting and producing subsequent disease in this young age group. Two cases of meningitis arose during the year in children below the age of eighteen months. In neither case had the parents ever been x rayed, nor apparently had it been suggested to them that they should be x-rayed as a routine procedure. In both cases active infectious disease was identified in one or other parent.

Mortality

As previously mentioned, the decline in the death rate since 1950 was halted this year by a small rise from the figure for 1956. This year, sixteen deaths occurred from respiratory tuberculosis and two from non-respiratory forms, giving mortality rates for West Cumberland—with a population of 135,830—of 0.12 per thousand and 0.004 per thousand respectively. The corresponding figures for the United Kingdom are 0.095/1,000 and 0.012/1,000. The combined rates thus are for all forms, West Cumberland 0.124/1,000, United Kingdom 0.107/1,000.

Of the total deaths (18), five patients were aged less than 50 years and the remainder (13) were aged fifty years or more, about half of these being above the age of sixty. It is also worthy of comment that four patients were found to have tuberculosis at post-mortem examination and had received no treatment for a condition which had not been diagnosed in life.

Treatment

With the opening of Homewood Annexe the majority of patients have been treated either there or at Galemire Infectious Diseases Hospital where twelve beds are currently allocated to tuberculous cases. The pattern of treatment has again been almost entirely that of bed rest combined with appropriate antibiotics and chemotherapy with or without subsequent resection of any disease remaining at the conclusion of apparently effective conservative treatment. Very little collapse therapy has been instituted: three artificial pneumoperitoneum cases were induced in a total of 121 admissions. Forty cases were transferred to Seaham Hall for major surgical procedures—all resection; no thoracoplasties or other collapse procedures have been carried out.

The downward trend in bed occupancy commented upon in earlier reports is again noted; the average daily occupied bed state for the year has been as follows:

TABLE 2

Hospital	Bed Allocation	Average Daily Bed Occupancy	Discharges and Deaths	Average duration of stay (in days)
Homewood ...	41	36.9	130	103.56
Galemire ...	12	12.37	44	102.34

Refill clinic:

Attendances at these sessions have again fallen with further abandonment of measures induced in years immediately preceding the opening of Seaham Hall. By the end of the year the refill clinic register totalled 32 cases, the average attendance per session being 29.

Chest Clinic Attendances.

TABLE 3

Summary of chest clinic statistics

Clinic	No. of Sessions		New Patients		Total Attendances	
	1957	1956	1957	1956	1957	1956
Workington ...	178	193	800	957	4,566	5,140
Egremont ...	165	187	973	1,212	3,352	4,469
Millom ...	18	17	88	106	296	371
Total	361	397	1,861	2,275	8,214	9,980

It will be seen from this table that there has been both a fall in the total number of sessions and in the total attendances during the year. Most of this reduction in sessional time has been brought about by a fairly constant failure rate of contacts to attend for routine examination which after some time prompted one contact session weekly to be discontinued: moreover, the refill clinic sessions continued at a rate of one a week instead of two per week as had previously been the case. The noticeable fall in total attendances is mainly attributable to the decrease in refill clinic procedure. Of the total fall in attendances at Workington of some 1,500 in the year, 1,300 of this difference represents the fall in refill attendances.

At consultative sessions there was an increase of 300 non-tuberculous attendances and a decrease of about 150 tuberculous compared with 1956. Practically the same number of contact attendances occurred in each of the two years (2,347 in 1957: 2,288 in 1956). The average attendance per consultative session was slightly lower at two of the three clinics in 1957 than in the previous year, relative figures being:— Workington 23.4 (23.4), Egremont 21.6 (23) and Millom 16.4 (21.8). These figures confirm that very much the same volume of work is passing through the Egremont Chest Clinic as at Workington, although it is far less spacious than Workington in all its departments: in particular the x-ray facilities can at best be described as make-shift and the processing-room little more than a cubicle. There is no doubt that the emphasis of chest clinic work will remain in the southerly portion of West Cumberland which this clinic serves, and although there are signs of a decrease in the volume of work annually, it should be borne in mind that little real decrease in investigation can be envisaged for many years although it is hoped that the rate of diagnosis for both tuberculosis and other chest diseases may be shown to be declining.

Contact Examinations

Although the total number of contacts seen during the year is very much the same as in 1956, fewer new contacts attended for investigation. Of those seen approximately the same proportion was found uninfected and suitable for B.C.G. vaccination, 759 being vaccinated (751 in 1956), including 56 new-born infants.

In 1957, 1,305 new contacts were seen compared with 1,753 for 1956: an additional 1,017 contacts already seen in earlier years re-attended for routine examination. In addition, 4,182 adult contacts were referred to the mass x-ray unit for examination, of which 1,277 are known to have attended. The total number of contacts examined by all these measures during 1957 is 3,599 (3,579 for 1956).

The ratio of new contacts examined to new cases diagnosed is 3,599: 151 or 24:1. As in previous years, contact search has been confined to the familial and household relatives of index cases, the number of new cases of active tuberculosis found from amongst contacts examined being 26, representing a contact case rate of 7.2/1,000.

For West Cumberland the reactor rates to 1/1,000 O.T. of contacts seen were:—

Age	Rate Percentage
0—4	3.5
5—9	14.3
10—14	35.0

TABLE 4

Reactor rate percentage by clinical areas

Age	Workington	Whitehaven	Egremont
0—4	6.8 (147)	1.0 (123)	2.0 (100)
5—9	17.7 (96)	7.7 (90)	18.1 (55)
10—14	29.1 (48)	21.1 (37)	50.0 (24)

Figures in brackets refer to total tuberculin tested

There has been some variation in the reactor rates compared with those found in 1956: most of this change is probably attributable to the relatively small numbers in each age group tested. However, there is still noticeable a sharp increase in reactor rates in the years between five and fourteen.

Now that the routine testing and B.C.G. vaccination where necessary, of the school leaving group has become a firmly established voluntary procedure throughout this area, with a very satisfactory acceptance rate by parents, the chest clinic service is giving greater emphasis in its work to those age groups younger than thirteen years; for it has been found that many teenage contacts when first identified as such have already received B.C.G. vaccination at the age of 13 at school: it is hoped that this very satisfactory preventive programme may continue.

Case Finding Procedures

Again the mass x-ray unit visited West Cumberland, devoting time here in proportion to the population of this area in relationship to the population of the Special Area to which it is allocated. Approximately the same number of adults and school children passed through the unit as in previous years: the details of work and the findings of the examinations are set out in table 5 below.

TABLE 5

West Cumberland

Source of examination	Mini. Films	Large Films	Clinical exams	Active T.B.	Inactive T.B.	Br'sis	Neo-plasms	Pn'sis	Cardiac conditions
Doctor's cases	138	32	9	—	6	2	—	2	2
Ante-natal cases	13	—	—	—	—	—	—	—	—
Contact cases	1,277	91	22	4	42	2	—	12	8
Scholars	3,459	98	22	3	26	3	—	—	1
School staff	—	—	—	—	—	—	—	—	—
General Public	8,184	421	112	13	103	13	4	75	44
Surveys	6,409	194	35	4	43	3	—	3	12
M.D. patients	330	14	3	—	6	1	—	—	5
Totals	19,810	850	203	24	226	24	4	92	72

Assuming that there has been no undue repeat examinations in the current year, it is interesting to note that only 24 cases of active tuberculosis were identified in approximately twenty thousand people examined: this is by far the lowest number of fresh active cases found by the unit since it has come to West Cumberland. The tendency for there to be a fall in symptomless cases so found is clearly shown by the following data:—

Year	Total Attendances	Fresh active cases of tuberculosis
1954	20,533	100
1955	19,934	60
1956	19,743	56
1957	19,810	24

As has been the case in previous years, a relatively high number of cases of pneumoconiosis were identified on the mass x-ray unit: and it is interesting to note that this is the first year in which a smaller number of both active and inactive cases of tuberculosis were found in West Cumberland than in East Cumberland.

A comparatively large number of cases continue to be referred from the general hospital wards and a much smaller proportion of cases than hitherto has been found amongst the contacts examined.

Two small tuberculin surveys carried out by school medical officers in areas where the probability of infection had been deemed high provided surprising results. At one school of mixed ages up to ten years 51 children were tested with O.T. and three reactors found. All three reactors were contacts of cases within their family households, two of them previously known to the chest clinic. In the other survey, which has been reported in full in the annual report of the Principal School Medical Officer for 1957, of 100 children tested two new reactors were found, the group being of school entrant age. A total of 23 reactors was observed, but 18 of these had previously been seen at the chest clinic and given B.C.G. vaccination as contacts. No new cases of tuberculosis were found amongst the adult contacts of the two new reactors; one had been an intimate contact of a previously known sputum positive case living close by. Full contact investigation of the other has not yet been completed and probably will not be effected, as many of the relatives of the child with whom possible contact previously existed now reside abroad."

Orthopaedic Treatment

General Statistics

Number on aftercare register, 1/1/57	668
New cases during 1957	172
New cases notified for physiotherapist only	76
Cases re-notified after previous discharge	4
Number of cases removed from register	235
Number remaining on register at 31/12/57	685

Number of attendances at surgeons' clinics	751
Number of attendances at aftercare clinics	1,530
X-ray examinations during 1957	104
Waiting for X-ray	73
Home visits	672
Plasters applied	93
Surgical boots and appliances supplied (including insoles)	267

Orthopaedic Conditions Affecting Children Under Five Years of Age

Bow legs and knock knee	178
Flat foot	76
Congenital defects of feet and otherwise	58
Poliomyelitis	8
Torticollis	5
Cerebral palsy	13
Congenital dislocation of the hip	5
Birth palsy	2
Scoliosis, lordosis and kyphosis	3
Postural defects, feet and otherwise	9
Hallux valgus and deformed toes	4
Spina bifida	3
Osteomyelitis	1
Other conditions	37
	402

Tuberculosis of Bones and Joints

	Adults	School Children	Under 5 years
Totals	78	22	—

Adult Non-Tubercular Cases

Poliomyelitis	24
Arthritis	19
Scoliosis, lordosis and kyphosis	8
Congenital dislocation of the hip	14
Slipped epiphysis	2
Flat foot	4
Osteomyelitis	8

Vertebral disc protrusion	31
Hallux valgus and deformed toes	9
Injuries including fractures	40
Cerebral palsy	15
Congenital defects	6
Postural defects, feet and otherwise	12
Spina bifida	2
Distrophies	4
Other conditions	7
	205

Hospital Admissions

Name of Hospital	In hospital at 1/1/57	Admitted during the year	Discharged	In at 31/12/57
Ethel Hedley Hospital, Windermere (including school children) ...	16	40	41	15
Shropshire Orthopaedic Hospital, Oswestry	3	4	2	5
(in addition to these long stay cases 4 patients were admitted and discharged after short-term review).				
Cumberland Infirmary and City General Hospital, Carlisle ... (including school children).	3	32	32	3

Attendances at orthopaedic clinics have been very much the same as previous years. Rather more home visiting has been undertaken, including physiotherapy treatments in some of the smaller hospitals.

As I mentioned last year, the remedial and corrective treatment of defects in the pre-school child is an important section of our clinic work, aiming at the avoidance of more serious trouble during the child's school days—and here we find the co-operation with the health visitors of great value, both in bringing the small children to the notice of the orthopaedic clinic and in following progress in their regular home visiting.

Prevention of Blindness and Care and After Care of Blind or Partially Sighted Persons

The welfare of the blind is dealt with each year in detail by the County Welfare Officer in his section of this report.

The following table shows the position in the county for 1957:—

A. Follow up of Registered Blind and Partially Sighted Persons

	Cause of Disability			
	Cataract	Glaucoma	Retrolental Fibroplasia	Others
(i) Number of cases registered during the year in respect of which Section F. of Forms B.D.8 recommend:—				
(a) No treatment	8	4	--	30
(b) Treatment (Medical, surgical or optical) ...	18	9	--	18
(ii) Number of cases at (i)(b) above which on follow-up action have received treatment	3	6	—	5

B. OphthalmiaNeonatorum.

(i) Total number of cases notified during the year 2

(ii) Number of cases in which: —

(a) Vision lost ... ...)
(b) Vision impaired ... ...) Nil
(c) Treatment continuing at end of year ... ...)

Leukaemia

While a relationship between exposure to ionising radiations and the development of leukaemia and other malignant conditions has for some time been recognised, it is only recently that attention has been directed towards the search

for contributing factors in the environmental and dietary and social habits of families in which a case of leukaemia or cancer develops.

The increased risk among children in the first two years of life of developing leukaemia has been shown to be widespread throughout the country, and the published results of recent investigations suggest that the disease more frequently affects families with a higher standard of living and, geographically, southern to a greater extent than northern counties.

While it is most important to avoid the pitfall of drawing any conclusions from small numbers, the distribution of deaths from leukaemia in Cumberland throughout the years 1950 to 1957, as set out in table X, is of interest. It is seen that over these eight years the total deaths in rural districts is double that in urban districts of the county. Deaths occurring in young children in the years 1956 and 1957 (table Y) are seen to be few compared with adults, particularly of the later decades. Figures for the county as a whole over the years 1950 to 1956 show a preponderance of lymphatic and myeloid types over monocytic and other unspecified types. Of the 29 deaths in the last two years, 13 were of the lymphatic type, other types being myeloid and monocytic (5 each), the remaining 6 cases being unspecified as to type. Females exceed males in the two-year period by 18 to 11. Twelve of the cases for these two years occurred in households of semi-skilled and unskilled workers (Registrar General's Classes IV-V), with 4 and 10 respectively in the families of skilled manual and of professional classes (Class III, and Classes I-II).

No conclusion of statistical significance can be drawn from the absence of leukaemia as a registered cause of death in the eight years in Penrith Urban and Alston Rural districts, nor from the preponderance of cases in the Border, Cockermouth, Ennerdale and Millom Rural Districts, the populations of which, as given in table X, should be taken into consideration. It is well to bear in mind that for the country as a whole the comparative mortality index for leukaemia and other malignant disease has increased since 1938. Further facts continue to be collected as the basis for leukaemia research broadens, but it may be some years before significant conclusions can be reached which can be of direct application to the preventive health services.

TABLE X.

Deaths—Leukaemia and Aleukaemia—per Registrar General's Statistics.

YEAR	TOTAL COUNTY	Cockermouth U.D.C.	Keswick U.D.C.	Maryport U.D.C.	Penrith U.D.C.	Whitehaven M.B.	Workington M.B.	TOTAL U.D.
Estimated Mid-1957 Population	217,600	5,340	4,700	12 510	10,590	25 960	29,200	88,300
1957	15	—	—	3	—	—	3	6
1956	14	2	1	—	—	—	—	3
1955	14	—	—	1	—	1	—	2
1954	4	—	1	—	—	1	—	2
1953	6	—	—	1	—	—	2	3
1952	7	—	—	1	—	1	—	2
1951	6	—	—	3	—	1	—	4
1950	6	—	—	—	—	1	1	2
TOTALS	72	2	2	9	—	5	6	24

Alston R.D.C.	Border R.D.C.	Cocker-mouth R.D.C.	Ennerdale R.D.C.	Millom R.D C.	Penrith R.D.C.	Wigton R.D.C.	TOTAL R.D.
2,250	29 440	19,550	28 950	14 320	11 500	23,290	129,300
—	2	4	—	2	—	1	9
—	1	2	2	2	2	2	11
—	2	3	5	1	—	1	12
—	—	—	2	—	—	—	2
—	1	—	2	—	—	—	3
—	3	—	1	1	—	—	5
—	1	—	—	1	—	—	2
—	—	—	1	3	—	—	4
—	10	9	13	10	2	4	48

TABLE Y

Deaths from Leukaemia, 1956/57, by Sexes and Age Groups

		All ages	Under 1 year	1-	5·	15-	25-	45-	65-	75 and over
1956	Males	4	—	—	—	1	—	2	—	1
	Females	10	—	—	3	1	1	3	2	—
1957	Males	7	1	1	—	1	—	2	1	1
	Females	8	—	—	1	2	1	3	—	1

Health Education

While nothing spectacular occurred in the health education programme in the county during 1957, it would seem that this aspect of the work is now firmly established and it is becoming more widely known that speakers from the nursing and health visiting staff are available as lecturers. Requests were received for speakers from Women's Institutes and the other women's organisations, from the St. John Ambulance Brigade and the British Red Cross Society. A number of the district nurses gave the home nursing course to the welfare section of the Civil Defence in Brampton, Keswick, Penrith, Whitehaven, Workington, as well as in Carlisle city. In all a total of 350 health education talks were given during the year.

The county Women's Voluntary Services started the One-in-Five series of talks. This consists of three talks on the hazards of atomic warfare and on what people can do to protect themselves and their families, and to mitigate the effects. The first two talks are given by specially trained women in the Women's Voluntary Services but the third talk on "Home Nursing in an Emergency and Simple First Aid" is given by a trained nurse. The whole series was first discussed with groups of our district nurses and towards the end of the year several nurses had given the talk to groups of women at the request of the Women's Voluntary Services and further talks had been booked for the New Year. While we all hope that atomic warfare may be a remote possibility, there can be no doubt that this third talk on simple home nursing and first aid disseminates important knowledge which would be useful in an emergency, national, local, or merely domestic.

A number of the schools asked for single talks from health visitors, but at one secondary modern school fortnightly talks were given to the older girls by a health visitor, and the pre-nursing course at the same school had fortnightly talks from one of the administrative nursing staff. In both instances a definite course of talks was given, sometimes with demonstrations or visual aids and the use of film strips. For completeness it must be added that at the hygiene inspections which are carried out once a term by the school nurse or health visitor, a great deal of simple health teaching to small groups of children is undertaken.

A talk on "Emergency Midwifery" was given once a month at the Police Headquarters, Carleton Hall, by one of the administrative nursing staff to groups of police constables attending the post-graduate courses arranged for the Cumberland and Westmorland police. The Superintendent Nursing Officer and her Deputy continued to give the lecture on "The Social Aspects of Disease" to student nurses at the Cumberland Infirmary and Whitehaven Hospital.

Relaxation and mothercraft classes for expectant mothers continued to function in the ante-natal clinics, although the attendances at these remained small. The domiciliary midwives themselves are responsible for the teaching and organising of these classes and all their booked cases are invited to attend. Unfortu-

nately in some of the country districts transport is difficult and it is only the woman eager to learn who will make the effort to attend. During pregnancy every woman is visited several times at home by the midwife and individual tuition is given, but there is no doubt that group teaching and discussion is of greater benefit and more lasting effect.

Mention should be made here of the in-service training available for the nursing and health visiting staff, and also for the home helps. During the spring and summer months small groups of the staff are able to meet at focal points in the county to discuss a particular aspect of the work. During 1957 five groups of midwives met with members of the administrative staff for a demonstration and discussion on various aspects of the midwifery technique. Six groups of nurses and health visitors met to discuss the One-in-Five talks, and nine meetings of home helps were held by the Superintendent Nursing Officer and her Assistants. After a discussion with the home helps about their work, a talk and demonstration was given on simple first aid in the home, this is a useful topic for home helps working especially for old people. The nursing staff were invited to attend the study days and lectures arranged by the Royal College of Nursing and Royal College of Midwives, both in the east and west of the county.

Smoking and Cancer of the Lung

Ministry of Health circular 7/57 drew attention to the conclusion of the Medical Research Council that the most reasonable interpretation of the very great increase of death from lung cancer in males during the past 25 years was that a major part of it was caused by smoking tobacco, particularly heavy cigarette smoking. The Council were asked to take appropriate steps to bring this information effectively to public notice so that the individual who smokes could know what risks were involved and could then make up his or her own mind.

It was felt that a particular effort should be made to bring these facts to the notice of young people in the hope that they might be persuaded never to start the habit. Consultations took place between officers of the health and education departments and the co-operation of the head teachers in the schools was solicited. Copies of the Health Education Journal in which this subject was fully discussed were made available to all head teachers and also to health visitors who have used this information as the basic material for their talks on the subject. Leaders of youth organisations and other bodies dealing with young people were told that the County Medical Officer, through his staff, would provide talks on request on this subject. At their staff meetings the medical officers, nurses and health visitors were informed of the latest developments and were asked to contact secretaries of local organisations, personnel managers of factories and so on, with offers of information. The Central Council for Health Education publicity material was widely dispersed over the county.

At the end of the year only a small number of special talks had been given and a survey of the reactions of older school children was interesting in

that the majority of boys and girls of 14 years of age admit to having started smoking. None were prepared to give a reason for this. They all seemed interested in the subject and asked for more definite proof of the dangers of smoking. It is obvious that to them chronic bronchitis and cancer of the lung are regarded as far too remote hazards to have much influence upon their young minds and actions.

Above all, I think it is important that this subject should be introduced into the normal health education programme of the authority for it is by sowing this seed, as it were coincidentally, during talks on other subjects, that I feel most good is likely to be done. There can I think be no doubt that the success of any campaign aimed at preventing the formation of a habit which is injurious to health must depend on the example set by adults and by the more revered members of family and community alike.

Prevention of Break-up of Families

The arrangements in Cumberland under this heading were described in my reports for 1955 and 1956.

In 1957 there have been no meetings of the two large county committees and instead there have been meetings in each area where the district medical officer of health is medical officer of health to the district councils and also assistant county medical officer. The meetings are summoned by the Children's Officer (the designated officer). The district medical officer of health is chairman and the Children's Officer and County Medical Officer are present or are represented. Apart from these officers, representation is entirely local consisting of officers of the children's, health, education and welfare departments, the housing and public health departments of the district councils, the probation service, the moral welfare service, National Assistance Board, N.S.P.C.C., and the Women's Voluntary Service. The advantage of this method seems to be that a smaller number of cases are considered at each meeting and the local officers take more interest in the cases. As a result they attend more regularly than was their custom at the larger county meetings. Reports are submitted by the social worker who is primarily concerned with each case and a decision is reached as to which worker or workers should exercise future supervision depending upon the individual circumstances. The district medical officer of health in his position as chairman is able to, and frequently does, convene small ad hoc case conferences outwith the normal meetings. To these informal conferences he invites other people, such as the general practitioner, policeman, or head teacher who may be able to give useful information which they would only be prepared to disclose to a smaller number of people than those who would be attending the normal area meeting. Finally, the district medical officer of health can very often take the initiative on his own to provide that personal advice and assistance which may prevent the break-up of a family.

SECTION 29

HOME HELP SERVICE

There has been no change in this service. The statistics are as follows, together with comparative figures for previous years.

Home Helps:—

No. of home helps accepted and enrolled on the register at 1st January, 1957 198

No. of home helps accepted during year 73

271

No. of home helps resigned during year 45

No. of home helps at 31st December, 1957 226

Districts in which the home helps reside:—

	1957	1956	1955	1954
Alston	10	8	10	7
Aspatria	18	17	15	16
Border Rural	44	37	35	37
Cockermouth	3	3	4	4
Ennerdale Rural	24	20	20	19
Keswick and Threlkeld	6	5	4	1
Maryport, Dearham and Gt. Broughton	16	16	15	19
Millom and district	16	10	6	8
Penrith and Penrith Rural	27	12	20	18
Silloth	13	11	11	11
Whitehaven, Distington and St. Bees	14	14	9	11
Workington	19	20	17	11
Wigton and Mealsgate	16	14	16	18
	226	198	182	180

Householders:—

No. of applications received for home helps	469	479	487	455
No. cancelled or not supplied ...	187	169	203	175
No. of new cases helped	264	296	258	265
No. of cases on books 1st January ...	342	317	253	236
Cases pending	18	14	25	36

Analysis of cases helped:—

Confinements	56	73	55	79
Tubercular cases	11	19	19	16
Old age and infirmity	329	304	230	190
Mental health	1	2	2	3
Cardiac	48	49	48	45
Blind	28	30	21	13
Cancer	1	2	2	3
Illness of long duration (cerebral haemorrhage, rheumatoid arthritis, etc.)	81	86	77	85
Illness of short duration (post operative, influenza, etc.)	51	48	56	67
	606	613	510	501

In each area meetings of home helps are held at which problems are discussed. In addition visits have been paid as follows:—

To householders	1,174
home helps	626
	1,800

SECTION 51

MENTAL HEALTH SERVICE

In my last annual report I commented at some length on possible changes in this service which might result from the recommendations of the Royal Commission which was appointed to enquire into and report to Parliament on the law relating to mental illness and mental deficiency.

The Royal Commission's report strongly urged that the existing law should be altered so that patients suffering from mental disorders could be given suitable care with no more restriction of liberty or legal formality than applied to persons suffering from physical illnesses, and advocated a tremendous increase in the scope of community services to shift the emphasis as far as possible from hospital care for the mentally handicapped or afflicted to care in the home.

Many of the Royal Commission's recommendations would necessitate new procedures to apply to individual patients and these cannot be effected without amendment of the present Lunacy, Mental Treatment and Mental Deficiency Acts. However, some of the recommendations for the development of community mental health welfare services can be undertaken under local authorities' existing powers without waiting for new legislation.

It was as a result of an observation by the Royal Commission that the Ministry of Health issued a Circular (No. 2/58) dated 15th January, 1958, which not only has had a greater impact on mental health procedure than any single document since the Mental Treatment Act, 1930, but must surely be taken as being indicative of the Government's willingness to accept and implement, so far as practicable, the recommendations of the Royal Commission. The effect of Circular 2/58 will be discussed in later paragraphs.

Administration

The administrative machinery by which the local health authority carries out its mental health functions remained unchanged during the year under review. There have been no staffing changes during 1957, and whilst we may regard the present staffing position as barely adequate for present commitments, I must again point out difficulties which will almost certainly be experienced during years to come. The present establishment allows for the appointment of one whole-time

psychiatric social worker and for child guidance work only. This post has not been adequately filled for three years, although for varying periods we have managed to secure the services, first of a qualified psychiatric social worker on a part-time basis, and latterly of an experienced social worker (not psychiatrically trained) also for part-time duties only. Repeated advertisement and approaches to the university training courses have produced not a single applicant, and as the demand for this specialised type of worker for many years has considerably exceeded the number of qualified workers, our chances of being successful in filling this post by normal methods of recruitment are virtually non-existent. When it is remembered that one of the most important mental health services which we should provide (the domiciliary aftercare of patients who have suffered mental illness) has not yet been attempted in Cumberland because of staffing difficulties we must, I suggest, be prepared to subsidise suitable students in their training so that by a contractual arrangement we shall ultimately have adequately trained staff to carry out this most necessary work at least during the contract period.

Furthermore, with the inevitable expansion in the community mental health service, a greater number of general social workers in the mental health field will be required. Various committees have been discussing the supply and demand, training and qualifications of social workers since 1951, but to date no nationally agreed training scheme for this type of officer has been devised. Recruitment and training take a considerable time, and here again I think we must give serious consideration to a scheme of "in-service" training of suitable candidates within the frame-work of our present local service.

Work undertaken in the Community

(a) Under Section 28 National Health Service Act, 1946

Local health authorities are empowered by this section to provide services for the prevention of mental illness and for the care and after-care of the mentally ill and defective. This power is only permissive at present in that the Minister of Health has not as yet issued a direction that such services shall be provided by local authorities although the after-care service has been described in an official report as "probably the least well-organised branch of the mental health service." The Royal Commission has recommended that the provision of preventive and after-care service should be imposed as a duty upon local health authorities and with the development of a more positive attitude to the promotion of mental health in the community, I think we can confidently anticipate that any new legislation which may emerge is likely to place responsibility for a comprehensive preventive and after-care community service squarely upon the shoulders of local health authorities. Here again we meet a staffing difficulty. Recruitment in the field of

mental health social work, falls far short of the numbers required, and this situation is not improved by the confusion surrounding the various schemes of training. Whilst this constitutes a national problem, our difficulties in a scattered rural area in an isolated part of the country make Cumberland's position even more acute. Adequately trained and experienced workers in this field do not often choose to take up appointments in areas offering little opportunity for professional (and social) contact. Nevertheless, and probably because of the limits imposed by a small staff, the range of preventive and after-care services in mental health is broadened to include assistance by a vast number of officers, public authorities, organisations and voluntary associations, not specifically nor directly connected with the local health authority, who, by a sound scheme of co-operation supplement this most necessary community service.

(b) **Under the Lunacy and Mental Treatment Acts, 1890-1930.**

During 1957, 413 Cumberland patients entered mental hospitals for treatment, and of these, all but 15 were admitted to Garlands Hospital. Only in 63 cases (15% of the total) was the entry to hospital arranged by a legal process involving powers of detention and necessitating the entry of the local health authority's officers. The proportion of patients entering the mental hospitals for treatment voluntarily continues to increase annually, and is a pleasing indication of a changing attitude to mental illness. Because it is now realised that treatment of a mental disorder does not necessarily require power to detain the patient in hospital, the statutory procedures for detention are invoked to a decreasing extent as each year passes. Cumberland is not behind the times in this matter because the percentage of the total patients admitted voluntarily to mental hospitals from Cumberland (85%) is slightly higher than the corresponding figures for England and Wales as a whole (78%).

Strenuous efforts are being made throughout the country to reduce the length of time patients need spend in hospital, and there are in hand many interesting projects which at this stage must be regarded as experimental. These include night hospitals to which patients who are able to continue in employment can return each evening for specific treatment. Better out-patient treatment facilities at psychiatric clinics increasingly demonstrate that many patients previously thought to need care which could only be given in hospital, can now receive what is required without entering hospital. At the same time, there is, inevitably, a residue of chronic patients in the mental hospital population, but hopeful progress is recorded even in the reclamation of this group, and schemes of re-education for return to the community which were previously thought to be impossible are now being carried out in many hospitals with outstanding results.

(c) **Under the Mental Deficiency Acts, 1913-38.**

(I) **Ascertainment.** The following table analyses the new cases officially ascertained during 1957 as being defectives within the meaning of the Mental Deficiency Acts.

(i) **Defectives "subject to be dealt with"**

	Male	Female
(a) Reported by Education Authority as ineducable (Section 57(3) and 57(4) Education Act, 1944)	10	4
(b) Reported by Education Authority as requiring supervision on leaving school (Section 57(5) Education Act, 1944).		
(i) on leaving special schools	8	—
(ii) on leaving ordinary schools	1	4
(c) Referred by Police or Courts	1	—
(d) Referred from other sources	3	3
Total "subject to be dealt with"	23	11
(ii) **Defectives not at present "subject to be dealt with"**	3	2
	26	13

During the year 277 cases were referred to the mental health section for some form of investigation and/or treatment. Apart from those officially ascertained as defectives, 108 children were referred to the child guidance centres for further investigation and treatment of maladjustment or behaviour disorders. A further 38 children were reported to the Education Authority as requiring some special form of educational treatment (following formal examination for the purpose of Section 34 of the Education Act, 1944) because of educational sub-normality, maladjustment or physical handicap, or because of a combination of such handicaps.

(2) **Supervision and Guardianship.** The total number of defectives within the jurisdiction of the Local Health Authority at the end of 1957 was 656. Of these, 341 were under hospital care, the balance of 315 patients being cared for in their own homes supplemented by supervision by officers of the local health authority. The supervision of defectives living in the county is primarily the task of the mental health field worker. For this purpose the county is divided into two (East and West Cumberland) and one mental health worker covers the whole territory of each of the two divisions. The case load per worker has increased by more than 50%

since the establishment was fixed on the inception of the present service in 1948, and even if additional duties are not placed upon the mental health services as a result of the Royal Commission's recommendations, the time is rapidly approaching when we shall have to consider the appointment of an additional officer to reduce not only the individual case loads, but the very large geographical territories at present operated.

The following table shows the number of defectives under various forms of domiciliary care (as distinct from those in hospital) at the end of each year since 1948:—

Year	Guardianship	Statutory Supervision	Voluntary Supervision	Total
1948	72	99	23	194
1949	66	119	52	237
1950	62	135	45	242
1951	60	152	42	254
1952	54	183	37	274
1953	49	207	36	292
1954	48	193	37	278
1955	47	219	34	300
1956	46	216	39	301
1957	41	236	38	315

It is interesting to note the numerical trends which have taken effect by a gradual process since 1948. Firstly, it should be noted that because of a continual programme of ascertainment, the number of defectives "subject to be dealt with" under the Mental Deficiency Acts (statutory supervision above) has more than doubled in ten years (from 99 in 1948 to 236 at the end of 1957), and that those not at present "subject to be dealt with" (voluntary supervision) have shown an increase of much less proportion. The number of defectives subject to Orders of guardianship has gradually decreased from 72 to 41 between 1948 and 1957. The reasons for this decrease have been outlined in previous reports, and can be briefly summarised by noting the extreme difficulty of finding persons who are able, willing and considered suitable to accept the very onerous duties which a Guardianship Order involves, the uncertainty surrounding the patient's future in the event of illness, resignation or death of a guardian (because of the national shortage of hospital accommodation for mental defectives) and because of increasing doubt as to the value of the guardianship provision by comparison with the less formal methods of domiciliary supervision.

The Ministry of Health and the Board of Control have considered the Royal Commission's recommendation that so far as possible community care services should be available to patients without procedures of compulsion. As long ago as 1948, local health authorities were asked to review the need to continue guardianship orders in cases where the Order had been taken out for the primary purpose of affording financial assistance in supporting the patient. At that time, whilst financial responsibility for the maintenance of defectives who were subject to guardianship orders was accepted by the National Assistance Board in all cases over 16 years of age, the local health authority decided that there was a continuing need for the additional safe-guards which are provided by an Order of Guardianship. The Minister has now asked local authorities (in Circular 2/58) to review once more all guardianship cases and recommend to the Board of Control the discharge of the Orders in those cases where less formal supervision would suffice. It is our experience that with the development of the community care service and a less rigid outlook on mental health matters, adequate supervision can be afforded in the majority of cases without the rather irksome legal involvements ensuing an Order of guardianship. As a result of this latest review of guardianship cases, I expect a large number of the existing guardianship orders to be discharged but the patients will, of course, remain under the supervision of the mental health staff.

It is also interesting to compare national statistics with those for Cumberland in relation to the percentages of patients in the various groups of the three recognised forms of domiciliary supervision. Of the total number of defectives living in the community (as distinct from hospitals) 75% of the totals both in Cumberland and in England and Wales as a whole are placed under statutory supervision because they are "subject to be dealt with" under the Mental Deficiency Acts. For England and Wales as a whole 22% are helped by local health authorities on a purely voluntary basis because, whilst being recognised as defectives within the meaning of the Mental Deficiency Acts, they are not for the time being "subject to be dealt with" under the Acts. The comparable figure for Cumberland is 12%. It is in relation to the guardianship provision that there is the widest variation between the national and the local figures. Only 3% of the defectives in England and Wales as a whole are subject to guardianship orders whereas Cumberland's proportion is at present as high as 13%.

The supervision of defectives living in the community must obviously be very closely linked with the hospital services for the mentally handicapped, because the present law imposes a duty on the local health authority to arrange for the patient's admission to hospital care if supervision at home is inadequate. The whole of Cumberland (and also the City of Carlisle and part of Westmorland) is within the catchment area of Dovenby Hall Hospital, and whilst the position of acute

national shortage of hospital accommodation for mental defectives continues to cause concern, it is pleasant to note that locally there has at least been no deterioration in the position. Our task of supervising the care, control and protection of defectives continuing to live in the community, is undoubtedly made much lighter by the facilities which are available at Dovenby for the short-term care of patients in an emergency. This scheme of temporary care to tide-over a critical situation within the defective's household, was used on 29 occasions during 1957, 21 patients being involved. The total number of patient days was 1596, so that the average length of stay was approximately 55 days. For the first time since the scheme was introduced in 1952, a child was admitted to a hospital other than Dovenby for observation purposes. This was a most difficult case in that the child suffered from multiple handicaps, and we were fortunate in being able to arrange for a period of observation in an annexe to one of the London mental deficiency hospitals which had special facilities for the investigation of deficiency of mind in association with blindness.

(3) **Occupation and training.** The obligation on the local health authority in this connection is "to provide suitable training or occupation for defectives who are under supervision or guardianship." Whilst this duty involves the provision of training facilities for defectives of all ages, (and the emphasis must obviously be on the provision of adequate facilities for the proper training of defectives of school age who have been excluded from the educational system because of severe mental retardation), the fact that there remains the duty to provide training or occupation for adolescent and adult defectives must not be over-looked.

Very briefly, training schemes take one of the three main forms. Firstly, there is the type of establishment, unfortunately referred to as "occupation centres" run very much on the same lines, for the same hours and for the same terms as primary schools, where the severely mentally handicapped child is given social and practical training within the limits imposed by his or her disabilities, with the prime object of making the child more self-reliant, more socially acceptable and less of a burden to his family and to society in general. It is always hoped that as a result of this form of training the young child will eventually be able to be self-supporting and continue to live at home whilst undertaking some suitable, though necessarily humble, employment. Secondly, the juvenile day training centre should be followed by some form of sheltered workshop (again unfortunately called "industrial centres") where those adolescent and adult defectives who cannot be placed in paid employment under competitive labour conditions, can be usefully occupied and at least have the benefits of a regular working routine, social contacts outside their own homes and some small measure of independence. Finally, for those defectives who live at too great a distance from day training centres, or who for physical reasons

cannot attend either day training centres or sheltered workshops, minimal training can be provided by peripatetic home teachers.

In Cumberland, because of the sparsely populated rural nature of the county, it has so far only been possible to provide two whole-time day training centres at Whitehaven and Wigton and these serve the more densely populated areas of the county. Both these centres offer training facilities (principally for juveniles) from fairly wide catchment areas. At Whitehaven, the demand for this form of training is rapidly overtaking the capacity of the present building, which is in any case of temporary construction. At the time of writing an extension in a permanent form of building which will provide facilities for about another 25 defectives is in course of erection. In due course, the present temporary structure will we hope be replaced by a permanent building on the same site. The present training centre at Wigton consists merely of inadequate and unsatisfactory rented accommodation in a church hall. A suitable site has been secured and a new building is in course of erection. This will provide proper training facilities for defectives, and will, in addition, replace the present school dental and infant welfare clinic at Wigton. The following table gives details of the training position at occupation centres at the end of 1957:—

	Under 16		16 and over		Total	
	M	F	M	F	M	F
Number attending occupation centre ...	23	14	1	8	24	22
Awaiting admission to occupation centre	5	1	—	1	5	2
Refused available facilities	3	2	—	—	3	2
No occupation centre available ...	8	6	—	1	8	7
Total suitable for training in occupation centres	39	23	1	10	40	33
Number suitable for training in industrial centre	1	1	40	40	41	41
Number suitable for home training ...	—	—	4	11	4	11

From this table it should be noted that a number of children who have an urgent need for (and an equal right to) proper training are unable to be offered such training because of the difficulty (which was noted by the Royal Commission on the law relating to mental illness and mental deficiency) of organising training centres in sparsely populated rural areas. It has been felt for some time that one possible solution to this problem would be the provision of a residential training centre for those children living in the more remote parts of the county area. The Royal Commission has re-enforced this opinion and extends it by suggesting that local health authorities might consider providing residential homes for boarders

near centres which are also attended by day pupils, and goes on to suggest that the boarders might return home at weekends, or if more convenient, they might stay for the equivalent of a school term in residential accommodation. The Orton Park Children's Home is to be no longer used as a children's home from the end of 1958, and I would submit for the serious consideration of the Council that the property be taken over for mental health purposes. The property is situated within easy reach of Carlisle (as being a good terminal for transport from the areas not at present served by training centres), and is easily accessible to the new day training centre which is in course of erection at Wigton. By taking over this property, the local health authority would be in a position to offer training to all juvenile defectives within the county area. Unless such a scheme is eventually approved, I can see no alternative method of providing regular training for your defectives in areas such as Penrith, Keswick, Alston, Millom and many of the isolated villages in the south and east of the county area, because the demand for an additional day training centre in any of the county districts outside the catchment areas of the two existing centres, is not likely within the foreseeable future to justify the establishment of another centre.

There is bound to be a considerable increase in the duties imposed on local health authorities in training and occupation schemes if the recommendations of the Royal Commission are implemented by Parliament. With the suggested shifting of emphasis from hospital to domiciliary care, the Royal Commission recommends that in addition to providing training facilities for defectives, the local mental health service should be required to provide sheltered workshops and social centres not only for patients suffering from deficiencies of mind but also for psychopaths and for patients with disabilities following mental illness which cannot be catered for by the present rehabilitation service for disabled persons.

Institutional Treatment

At the end of 1957, 341 patients from the county were in mental deficiency hospitals (or on licence therefrom) as follows:—

	1957	1956
In the area of the Newcastle Regional Hospital Board:—		
Dovenby Hall Hospital, Cockermouth ...	245	247
Durran Hill House, Carlisle	7	7
Aycliffe Hospital, Heighington, Darlington ...	7	6
Morpeth and Northgate District Hospital ...	4	4
Lemmington Hall, Alnwick	2	2
General Hospital, West Hartlepool	1	2
Prudhoe and Monkton Hospital, Prudhoe ...	3	3
Bishop Auckland Institution, Durham ...	—	1

In other Regions:—

Milnthorpe Hospital, Kendal	29	30
Royal Albert Hospital, Lancaster	18	17
Lisieux Hall, Chorley	4	4
St. Mary's Home, Alton, Hants.	2	2
Hortham Colony, Almondsbury, Bristol ...	2	2
Monyhull Hall, Birmingham	2	2
Totterdown Hall, Walton-on-Thames	—	1
St. Raphael's Barwin Park, Herts.	1	1
House of Help, Bath	1	1
Stanley Hospital, Ulverston	1	1
Leavesden Hospital, Watford, Herts.	2	1
Clarefield Court Hospital, Maidstone ...	1	1

Under the jurisdiction of the Board of Control:—

Rampton Hospital, Retford, Notts.	4	4
Moss Side Hospital, Maghull, Liverpool ...	5	6
	341	345

The total is four fewer than the previous year, and this is the result of nine new admissions, one admission to Dovenby by transfer from guardianship, eight discharges from Order and six deaths. Whilst we all hope that the Royal Commission's carefully considered recommendations will be ultimately implemented by legislation, (and in particular the suggestion that patients no longer requiring either active treatment or nursing care should be discharged from hospitals) it is also to be hoped that in consequence the available mental deficiency hospital accommodation will more nearly compare with the demand. Defectives are admitted to hospital care either for specific treatment or because domiciliary care is inadequate and only as a last resort, but the need for hospital accommodation will always exist, and until the provision is completely adequate to a need, no domiciliary service for the mentally defective can be wholly successful.

The local health authority's duty as regards the supervision of defectives is quite clearly laid down, but equally clearly it becomes the duty of the authority to arrange for the admission of the patients to hospital if care in the home is inadequate. The fact that we have waiting lists for admission to mental deficiency hospitals gives proof that the local health authority is unable to fulfil its statutory duty. Fortunately, the waiting list position has not materially worsened during

the year under review, as the following table giving the situation at the end of 1957 will show. The corresponding figures for 1956 are given in brackets.

	Under 16	16 years and over	Total
1. In urgent need of institutional care			
(a) Cot and chair cases	1 (2)	— (—)	1 (2)
(b) Ambulant low grade cases ...	1 (2)	1 (1)	2 (3)
(c) Medium grade cases	4 (1)	1 (2)	5 (3)
(d) High grade cases	— (—)	— (1)	— (1)
	6 (5)	2 (4)	8 (9)
2. Not in urgent need of institutional care			
(a) Cot and chair cases	2 (3)	— (—)	2 (3)
(b) Ambulant low grade cases ...	1 (2)	3 (4)	4 (6)
(c) Medium grade cases	6 (8)	13 (9)	19 (17)
(d) High grade cases	— (—)	6 (2)	6 (2)
	9 (13)	22 (15)	31 (28)

Numerically the totals of urgent and non-urgent cases in need of institutional care are virtually unchanged and it is to be noted that there were slight reductions in the number of the lower grade types awaiting hospital care. It is, of course, obvious that when a bed becomes available, it is offered to the patient whose need for transfer from home to hospital is most urgent at that time, and by no means necessarily to the patient whose name has been on the waiting list for the greatest number of years. This means inevitably at least so far as Dovenby Hall Hospital is concerned, that the proportion of lower grade patients is gradually increasing, and that it is in the wards for lower grades that the over-crowding is most severe. The turn-over of cases requiring continual treatment and constant nursing care is necessarily small and the chances of such patients returning to life in the community are infinitely less than for the higher grade and physically fit defectives. This shortage of hospital facilities for defectives is a national problem both in content and solution, and is excused on the grounds of financial stringency, the difficulty of securing nursing staff, etc., but every patient whose name is on a waiting list constitutes a tremendous human problem which has considerable repercussions not only on the patient, but also on his family unit and society in general. Finally I would quote one illustrative case. This is a five year old boy who suffered irreparable brain damage as a result of meningitis when less than a month old. He now

needs the continual care which a baby of a few months would normally require. He is paralysed in all limbs, unable to talk or make his wants known, is doubly incontinent and has to be spoon fed. His mother, who has one other child, can at best be described as a most indifferent housewife of sub-normal intelligence, incapable of giving her child the continuous care which he needs. Efforts to secure a bed in a mental deficiency hospital have hitherto been unsuccessful, and the prospects of admission are officially described by the Regional Hospital Board as " very poor ". In the meantime, the local health authority can but do its best to ameliorate a completely unsatisfactory home situation and hope that hospital accommodation for the child will become available before a tragedy occurs.

Reports and Notes on Individual Services and other Matters

Infectious Diseases

Inspection and Supervision of Food

Water and Sewerage

Housing

Windscale

Notification of Cases of Infectious and other Notifiable Diseases

	Scarlet Fever	Whooping Cough	Acute Poliomyelitis, Paralytic	Non-Paralytic	Measles	Diphtheria	Dysentery	Meningococcal Infection	Acute Pneumonia
Urban Districts									
Cockermouth ...	1	8	—	—	8	—	—	—	—
Keswick	—	—	—	—	—	—	—	—	—
Maryport	1	81	—	—	467	—	—	—	5
Penrith	3	26	1	—	326	—	—	—	3
Whitehaven ...	2	41	—	—	65	—	2	—	41
Workington ...	5	27	—	—	726	—	2	1	16
Rural Districts									
Alston	—	46	—	—	9	—	—	—	—
Border	3	71	1	—	688	—	—	—	18
Cockermouth ...	2	30	—	—	175	—	1	1	11
Ennerdale	2	105	—	—	365	—	14	1	17
Millom	2	55	4	1	8	—	—	—	39
Penrith	3	27	5	3	286	—	1	—	23
Wigton	1	144	—	—	434	—	—	2	9
TOTAL FOR YEAR	25	661	11	4	3557	—	20	5	182
1956	40	625	46	11	2256	—	47	5	135
1955	69	207	4	3	834	—	165	7	78
1954	134	746	5	4	2890	—	23	12	105

Smallpox	Acute Encaphalitis, Infective	Post Infectious	Enteric or Typhoid Fever	Paratyphoid Fever	Erysipelas	Food Poisoning	Tuberculosis, Respiratory	Meninges & C.N.S.	Other	Puerperal Pyrexia	Ophthalmia Neonatorum
—	—	—	—	—	—	2	4	—	—	—	—
—	—	—	—	—	—	—	3	—	—	—	—
—	—	—	—	—	3	1	7	1	1	—	—
—	—	—	—	—	2	2	6	—	1	—	—
—	1	—	—	—	1	—	28	—	4	1	1
—	—	1	—	—	4	—	33	1	5	37	—
—	—	—	—	—	—	—	3	—	—	—	—
—	1	—	—	—	1	1	22	—	5	1	—
—	—	—	—	—	—	21	6	—	1	1	1
—	—	—	—	—	1	—	40	—	5	2	—
—	—	—	—	—	4	—	17	—	6	—	—
—	—	—	—	—	—	1	6	—	—	—	—
—	—	—	—	—	3	—	11	—	4	2	—
—	2	1	—	—	19	28	186	2	32	44	2
—	—	2	1	2	25	16	260	2	27	16	2
—	—	2	—	—	21	3	298	—	24	48	—
—	1	—	—	—	45	13	256	—	44	—	—

Infectious Diseases

Details of all cases of infectious diseases are set out in the table. Once again no cases of smallpox or diphtheria were notified. Apart from a large outbreak of influenza there was no epidemic of important infectious disease in the county. At the end of 1956 a large number of cases of measles occurred in the Whitehaven and Ennerdale districts and at the beginning of the present year this disease spread to Maryport, Workington and East Cumberland districts.

Asiatic Influenza

Some weeks before the epidemic reached Cumberland, copies of a note received in June from the Chief Medical Officer, Ministry of Health, had been circulated by medical officers of health to all general practitioners in the county and to medical officers in certain industries, drawing their attention to the recommendations contained in the Monthly Bulletin of October, 1956. As cases began to occur in September, medical officers of health made their own arrangements for obtaining information from those general practitioners in their areas who were prepared to act as "spotters", and for keeping the County Health Department informed Information was also given by local offices of the Ministry of National Insurance, personnel managers of factories, area education officers, heads of schools and school attendance officers. Preparations had been made at the laboratory at the Cumberland Infirmary for the possible reception of large numbers of throat swabs and blood samples and from the first four throat swabs submitted in the second week of September from the Border R.D. Type A. virus was isolated. The first report to the Ministry of a developing outbreak was sent by Dr. Dobson, Medical Officer of Health Whitehaven M.B. and Ennerdale R.D. on 20th September. but by 18th October no further weekly progress reports from these two districts were necessary. By the end of the month the epidemic was subsiding throughout the county. Plans for mutual aid were made at a meeting in October of representatives of the hospital service and of the local health authorities and local medical committees of the county and Carlisle City, while arrangements for the emergency feeding of school children in the event of school meals staff depletion and for sudden excessive demands on school transport had been agreed with the Director of Education in August. No school had to be closed due to illness of the teaching staff but one small country school closed itself for want of pupils. With this one exception school absences ranged from 25% to 80% without following any conclusive geographical pattern. The disease was on the whole mild. deaths being from pulmonary complications and mainly in the older age groups. A comparison of influenza deaths by sexes in the fourth quarter with the aggregate of the first three-quarters is shown in the following table: —

		AGE								
		0-	1-	5-	15-	25-	45-	65-	75-	Total
1st-3rd quarters:	Males	—	—	1	—	2	1	2	1	7
	Females	—	—	—	—	—	—	1	1	2
	Total	—	—	1	—	2	1	3	2	9
4th quarter:	Males	—	1	3	—	1	6	5	4	20
	Females	—	—	2	2	2	5	5	3	19
	Total	—	1	5	2	3	11	10	7	39

The arrangements for vaccination are described on page 40.

Inspection and Supervision of Food

I am indebted to the Chief Inspector of Weights and Measures for the report which follows: —

Food and Drugs Act 1955

Summary of work done under the above Act during the year ended 31st March, 1958

	Total Samples Obtained		Genuine	Unsatisfactory	
	Milk	Other Foods		Milk	Other Foods
Submitted to Public Analyst	30	234	239	16	9
Tested by Inspectors	451	—	421	30	—
	715		660	55	

Milk

The presumptive standard for milk laid down in the Sale of Milk Regulations 1939 is 8.5% solids-not-fat and 3.0% fat. The average quality of the samples of milk tested by the inspectors by means of Gerber apparatus was 8.68% solids-not-fat and 3.57% fat. Compared with last year's results the standard remains about the same, there being a slight reduction in the fat. These averages do not include the results of analyses of milk by the Public Analyst.

The number of unsatisfactory samples of milk is considerably lower than last year, there being a reduction of 73, the percentage this year being 7.7% as against 14.4% last year.

The 30 unsatisfactory samples of milk tested by the inspectors were only slightly deficient in solids-not-fat or fat and in each case the producer was noted for further sampling and in the majority of cases the second samples taken showed an improvement. It is noticeable that this year the number of unsatisfactory milk samples during the period January to April has fallen considerably and the standard of milk during this period has improved.

Where an informal sample is taken by the inspector and found to be seriously deficient, or to show added water, a formal sample is obtained immediately and submitted to the Analyst.

The 30 samples of milk submitted to the Public Analyst included several "Appeal to Cow" samples. Sixteen samples were found to be unsatisfactory, although 8 of these were certified to be genuine but below standard. The four producers concerned with these 8 samples were cautioned and advised to contact the local Agricultural Advisory Committee with a view to improving the quality of milk from their herds. Further samples taken from these producers show that an improvement has been obtained. The remaining 8 unsatisfactory samples contained extraneous water and 4 of these, from the same source, were the subject of a prosecution. The farmer concerned was found guilty and fined £50 with £5/5/0 costs. The producers responsible for the other 4 unsatisfactory samples were cautioned.

The Milk (Special Designations) (Specified Areas) Order, 1956

Visits have been made under this Order and with few exceptions all the milk sold was found to comply with the provisions. There are a number of consents issued by the Ministry which still apply, but these are gradually being withdrawn and most of the milk sold is now designated. Difficulties regarding the supply in rural areas have been overcome and as far as is known supplies have been maintained.

During the year the Order was extended to North Lancashire and this affected some retailers in the Millom area. There is a proposal to extend the Order to cover the Borough of Whitehaven and the Rural Districts of Ennerdale and Millom. There is no doubt that this Order will be made and this will only leave the Rural District of Alston with Garrigill outside the Order.

Foodstuffs other than Milk

The samples taken comprise a wide variety of foods and drugs and care is taken to try and avoid duplication, particular attention being paid to the more

common foodstuffs and any new article coming on to the market. Sampling is carried out with a view to proving that any claim made by the manufacturers as regards both quality and quantity of the ingredients used is correct.

Of the 234 samples taken during the year, 225 were found to be correct and 9 unsatisfactory.

A sample of pork sausage (tomato) was certified as being deficient in meat content and also containing undeclared preservative. Legal proceedings were instituted, but the defence disagreed with the Analyst's figures and the magistrates ordered the third portion of the sample to be sent to the government chemist. This analysis disagreed with that of the public analyst and the case was withdrawn. There is still no official standard for the meat content of sausage and it is hoped that there will soon be an order made fixing the minimum amount of meat to be put into sausage.

Four samples of rum butter were found to be unsatisfactory, being deficient in rum content. There is no official standard for this article, but the public analyst states that it should contain at least 3.0% of rum. In all cases the rum content was less and the manufacturers were cautioned.

Two samples of meat and potato pies were incorrectly described as they contained a much greater proportion of potato than meat. Under the Labelling of Food Order ingredients should be named in the order of their importance, therefore a meat and potato pie should contain more meat than potato. The bakers concerned were cautioned.

A sample of rum truffles was incorrectly described, there being no evidence of proof spirit in the sweets. The label supplied by the manufacturers read "Rum Flavoured Truffles", but the assistant in the shop had omitted the word "Flavoured" when writing out a display card. The shopkeeper was cautioned.

A sample of cream puffs was found to contain imitation cream, the shopkeeper failing to exhibit a notice that only imitation cream was used and he was cautioned.

A complaint was received from the purchaser of a chocolate sponge cake that the article contained a piece of metal. The baker was prosecuted and fined £1 with £2/17/0 costs.

During the period under review, 85 samples of milk and 9 samples of other foodstuffs have been taken at schools, canteens and other County Council establishments. Of the milk samples, 83 were satisfactory and only 2 below standard. In both cases the deficiencies were small and further samples taken from the same

source were found to be satisfactory. The samples of food other than milk were all genuine.

Pasteurised Milk

Licences were issued during 1957 to five plants for the pasteurisation of milk, two being in Millom R.D.C., two in Ennerdale R.D.C. and the fifth one in Wigton R.D.C.

Sampling duties are carried out in all of these plants through the co-operation of the public health inspectors of the district councils concerned.

During the year 77 samples were taken and submitted to the phosphatase and methylene blue test. Of these, 62 were satisfactory to the phosphatase test and 15 were unsatisfactory. Seventy-six were satisfactory to the methylene blue test and 1 was unsatisfactory.

Water and Sewerage

As in the previous year the restriction of capital expenditure has again had a deterrent effect on progress with Sewerage and Water Supply Schemes. Whilst the preparation and submission of Schemes to the Ministry for approval has proceeded at much the same rate as in previous years, permission to commence work and incur expenditure on the schemes has been markedly slow.

Consultations and discussions between adjoining local authorities with a view to the formation of Joint Water Authorities in West and South Cumberland have continued and the County Council has expressed its willingness at all times to assist Authorities with technical and other advice if so requested.

In regard to the Order sought by the Carlisle City Council under Section 33 of the Water Act, 1945, prior to a Public Local Inquiry held in July, 1957, the Carlisle City Council decided not to go forward on the basis of a modified Order in the terms mentioned in my last report, but to seek an Order of a permanent nature as in their original application. The Minister's decision in making the Order was generally to give effect to the City Council's proposals, but that the Order should have effect only during periods of drought, i.e. when the flow at the intakes above the confluence of the Old and New Waters on the River Gelt falls below three million gallons per day; and that the duration of the Order should be limited to the period ending on the day of the coming into operation of the Corporation's River Eden Abstraction Scheme.

Apart from entirely new schemes for sewage disposal there have been instances where existing disposal plants have become overloaded. Two have reached the stage where almost complete renewal of the disposal units has been

thought to be a more economic proposition than the extension or alteration of existing plant. Technical advice by the County Engineer in one case may achieve a considerable saving to the authority concerned although in the other case, the new works have become a pressing need due to housing development arising out of a Ministry of Supply project.

At High and Low Hesket the Rural District Council have been authorised by the Ministry to invite tenders for the work in connection with the long-overdue sewering of these villages.

The Schemes considered during the past year are set out in the accompanying Appendix A. (Water Schemes) and B. (Sewerage Schemes).

APPENDIX "A"

Scheme submitted by	Name of Scheme	General Outline	Estimated or Final Cost	Grants Ministry	Grants County	Stage at 31st March, 1958
Border R.D.C.	(a) Low Row Water Supply Scheme.	Additional supply to present distribution system.	£2,200	—	—	Approved as sound and adequate on engineering grounds.
	(b) Crew Fell Water Mains Extension Scheme.	Mains Extension to existing Scheme.	£3,850	—	—	
	(c) Gilsland Water Mains Extension Scheme.	Mains Extension in Redbeck area to provide 5,000 galls. per day from Northumberland sources.	£1,850	—	—	
Cockermouth R.D.C.	Supplementary Water Supply to Dearham.	Laying of 950 yards of 6" pipe from Harker Marsh to Dearham Cross Roads and 335 yards of 2" pipe from Cross Roads to Pleasant View.	£2,422			In progress.
Ennerdale R.D.C.	Central and South Western Area Water Scheme.	Sections 3 & 4 — Main at St. Bees: Reservoir at Hygiene Place: treatment works at Cold Fell.	Whole Scheme— £171,800 Part approved— £28,000	—	—	Ministry approval to stages 3 & 4. Reservoir under construction.
Millom R.D.C.	Water Supply to Northern Parishes — (Irton with Santon, Muncaster, Waberthwaite).	From Wastwater a bulk supply will be distributed to Seascale, Waberthwaite Eskmeals, Bootle (in emergency), Eskdale and Boot.	£185,000	—	—	Result of Ministry investigation awaited.
Penrith R.D.C.	Dale Water Supply.	Augmentation of Supplies in Armathwaite and Hesket areas.	£23,000	—	—	Approved as sound and adequate.
Wigton R.D.C.	Aspatria and Silloth Water Scheme.	Comprehensive Scheme for whole area.	£400,000	£3 000 per annum for 30 years from both Ministry and County. (Based on June 1956 estimate of £395,000).		Parts I, II and III substantially completed. Part IV (estimated at £132,847) approved as sound in principle.

APPENDIX " B "

Border R.D.C.	Brampton Sewerage Scheme.	Reconstruction Scheme to serve population rising to 4000.	£33,420			Ministry approval awaited.
Cockermouth R.D.C.	Branthwaite Sewerage Scheme.	Sewering of Branthwaite Village.	£14,265	£360 p.a. for 30 yrs.	£4,650 capital	In progress.
Ennerdale R.D.	Egremont — Braystones Outfall Sewer.	Storm Relief Sewers.	£31,364			Approved in principle.
Penrith R.D.C.	High and Low Hesket Sewerage and Sewage Disposal Scheme.	Scheme to serve 96 houses.	£21,440			Tenders invited.
Keswick U.D.C.	Keswick Sewage Disposal Works.	Reconstruction of Disposal Works.	£80,000	Not yet determined		Technical Assistance in preparation of scheme provided by County Council. Work in progress.
Wigton R.D.C.	Oulton Sewerage and Sewage Disposal Scheme.	Sewering of Oulton Village.	£17,000	£2,500 on 1955 estimate £10,750	£2.500 on 1955 estimate £10,750	

HOUSING RETURNS FOR THE COUNTY OF CUMBERLAND FOR YEAR ENDED 31st DECEMBER, 1957

(N.B. Corresponding figures for 1956 are shown in brackets)

		Alston R.D.C.	Border R.D.C.	Cockermouth R.D.C.	Ennerdale R.D.C.
Population ...	1931	2,678	26,049	21,250	28,235
	1951	2,327	29,848	19,560	29,631
A 1 Total number of occupied dwelling houses in the district: ...		893 (882)	7,880 (7,975)	6 095 (6,071)	8,803 (8,790)
2 Total number of occupied dwelling houses subject to Demolition Orders, Closing Orders or Undertakings ...		— (—)	28 (32)	19 (31)	129 (137
3 Estimated number of houses (exclusive of above) which are unfit for habitation and cannot be made fit at a reasonable cost		131 (140)	557 (599)	68 (65)	1,539 (1,552
4 Estimated number of sub-standard houses (exclusive of above) which could be repaired and made fit		360 (370)	850 (870)	N.A. (N.A.)	2,367 (2,476
5 Number of houses found to be overcrowded		27 (27)	34 (31)	5 (8)	19 (20
B. WAITING LISTS.					
Total number of valid applicants on Council's waiting list exclusive of those living in houses under A.2 and 3 above		23 (33)	235 (165)	513 (370)	504 (547
C NEW HOUSES COMPLETED DURING THE YEAR.					
1 By or for the Council —					
For aged persons		— (—)	17 (4)	4 (2)	— (—
For agricultural workers		— (—)	— (—)	— (—)	— (—
Flats		— (—)	16 (16)	— (—)	— (—
General Purpose Houses		— (12)	28 (56)	26 (16)	2 (5
2 Private building		1 (—)	33 (52)	30 (20)	2 (
Total ...		1 (12)	94 (128)	60 (38)	(5
D 1 Number of houses for which application was made by private persons for Improvement Grants under the Housing Act, 1949		12 (13)	41 (24)	32 (32)	(2
2 Number of houses for which grants were approved		12 (13)	37 (24)	32 (32)	(
3 Number of houses where improvements were carried out and grants paid		11 (10)	25 (42)	19 (38)	(
4 Number of houses purchased or taken over by the Council with a view to improvement or conversion		7 (—)	— (—)	2 (—)	(
5 Number of houses improved by the Council —					
(i) with grant		4 (—)	— (6)	— (6)	(
(ii) without grant		— (—)	5 (—)	2 (—)	(
E TEMPORARY ACCOMMODATION.					
Number of families occupying camps and temporary buildings		— (—)	39 (41)	— (—)	(
F HOUSING PROGRAMME.					
Estimated number of houses to be built during the ensuing year.					
(i) Private		— (1)	(N.K.)	20 (20)	(
(ii) Council		— (8)	67 (57)	56 (42)	(

Millom R.D.C.	Penrith R.D.C.	Wigton R.D.C.	Total for R.D.Cs. in County.	Whitehaven Borough	Workington Borough	Cockermouth U.D.C.	Keswick U.D.C.	Maryport U.D.C.	Penrith U.D.C.
2,582	12,016	22,058	124,868	23,254	24,601	4,784	4,635	10,190	9,065
3,428	11,720	23,733	130,247	24,624	28,620	5 300	4,660	12,180	10,490
4,451	3,634	7,042	38,798	7,700	9,115	1,940	1,652	4,030	3,302
(4,216)	(3,615)	(6,944)	(38,493)	(7,349)	(8,733)	(1,943)	(1,650)	(4,041)	(3,249)
39	48	21	284	50	14	17	5	157	12
(—)	(36)	(36)	(272)	(106)	(72)	(13)	(5)	(148)	(41)
92	166	297	2 850	400	100	285	20	235	186
(124)	(196)	(316)	(2,992)	(450)	(200)	(290)	(20)	(242)	(216)
195	580	1,380	5,732	N.A.	50	18	100	151	78
(401)	(605)	(1,394)	(6,116)	(few)	(—)	(18)	(100)	(151)	(87)
6	68	4	163	4	N.A.	N.A.	Nil.	—	10
(11)	(76)	(9)	(182)	(nil)	(5)	(N.K.)	(Nil.)	(—)	(10)
93	—	253	1,621	560	880	253	130	288	125
(86)	(—)	(299)	(1,500)		(955)	(83)	(109)	(256)	(119)
—	—	6	27	—	—	—	—	—	—
(8)	(—)	(—)	(14)	(2 Disabled)	(—)	(—)	(—)	(—)	(—)
—	—	—	—	—	—	—	—	—	—
(—)	(—)	(2)	(2)	(—)	(—)	(—)	(—)	(—)	(—)
—	—	—	16	18	—	—	—	—	—
(—)	(—)	(—)	(16)	(—)	(—)	(—)	(—)	(—)	(—)
10	15	44	152	106	58	—	—	—	46
(19)	(17)	(29)	(199)	(194)	(160)	(—)	(22)	(20)	(112)
32	14	16	157	24	25	30	2	1	11
(19)	(8)	(14)	(122)	(7)	(—)	(8)	(2)	(8)	(12)
42	29	66	342	148	83	30	2	1	57
(46)	(25)	(45)	(353)	(203)	(160)	(8)	(24)	(28)	(124)
22	48	34	215	—	—	6	2	5	9
(42)	(39)	(29)	(200)		(—)	(5)	(2)	(—)	(23)
20	47	29	198	—	—	6	—	5	7
(40)	(39)	(25)	(192)	(—)	(—)	(5)	(—)	(—)	(16)
19	46	27	171	—	—	5	—	—	7
(28)	(47)	(42)	(219)	(—)	(—)	(4)	(—)	(—)	(8)
1	—	—	10	—	—	—	9	—	—
(16)	(1)	(2)	(19)	(—)	(—)	(—)	(—)	(—)	(12)
2	2	—	8	—	—	—	—	—	—
—)	(—)	(—)	(12)	(—)	(—)	(—)	(—)	(—)	(—)
7	—	—	14	—	—	—	—	—	2
—)	(—)	(5)	(5)	(—)	(—)	(—)	(—)	(—)	(2)
—	—	41	80	—	—	8	—	—	23
—)	(—)	(41)	(82)	(—)	(—)	(8)	(—)	(—)	(37)
5	20	16	76	12	25	40	6	—	10
3)	(20)	(12)	(68)	(20)	(—)	(8)	(6)	(—)	(10)
—	20	—	345	140	—	12	—	N.D.	34
—)	(20)	(50)	(377)	(120)	(60)	(25)	(—)	(N.D.)	(100)

Housing

The County Council has continued to provide living accommodation for numbers of its employees including teachers, police, caretakers and administrative staff.

Costs have been somewhat higher than the previous year but the yearly increase is less marked than it was some three or four years ago. This is continuing the tendency which first became noticeable in 1955.

The labour position has been much easier and the long delays which were common a few years ago due to shortage of skilled labour have almost disappeared.

Nursing Service

Two houses were completed during the year and it is anticipated that another three will be commenced this year.

Police Service

Twenty houses have been completed and seven were in course of erection at the end of the year.

Education

Two staff houses have been completed at Newton Rigg Farm School. Two large houses have each been converted into two flats and another large house into two separate houses all for the use of teaching staff. Caretakers' bungalows have been completed at two schools and two more are under construction.

Staff Houses

Ten two-bedroom and two three-bedroom houses have been purchased in Carlisle for use by members of the administrative staff.

Improvements have also been carried out to a number of older houses used by teachers, caretakers, etc. These improvements include installation of bathrooms, additional bedrooms, etc

Accident at Windscale No. 1 Pile

The events which led up to and followed the contamination of the surrounding countryside by an emission of radioactive vapour from one of the nuclear reactors at the United Kingdom Atomic Energy Authority's plutonium factory at Windscale, attracted a great deal of publicity and created considerable public anxiety.

The accident resulted from a routine maintenance operation — a Wigner release, which is undertaken to give a controlled release of the energy which is stored in the graphite of the pile as a result of neutron bombardment. A second nuclear heating caused the failure of one or more uranium cartridges. The exposed uranium must have oxidised slowly and this would cause failure of other cartridges, and their combustion, until by the late afternoon of 10th October, the fire in the reactor had spread and it was found by visual inspection to be affecting the cartridges in about 150 channels. Two or three hours before it had been discovered that the scanning gear, which is normally used to isolate a burst slug, was jammed, presumably, in the light of later events, by the heat. The Windscale piles are cooled by air which is passed through the reactor and discharged through a high stack. They differ in this respect from the Calder Hall and other similar reactors which are cooled by carbon dioxide in a closed circuit. Earlier on 10th October a steady rise in activity had been noted near the filter at the top of the stack and this, along with other evidence, suggested one or more burst cartridges. Air counts from half hourly samples at different points on the factory site continued to rise and attempts to discharge the glowing cartridges in order to create a fire break and to reduce temperature with carbon dioxide brought from the adjacent factory at Calder Hall were proving largely abortive. About midnight the major decision was made that water was to be used if other methods continued to prove ineffective. Soon after midnight the Chief Constable of Cumberland, in accordance with a prearranged plan, was warned of the possibility of an emergency and men in the factory were given an emergency warning with instructions to stay indoors and to wear face masks. From late afternoon the Health Physics manager had mounted district surveys of gamma activity downwind of the factory and the contaminated area had been delimited upwind. Some measurements of air activity were also taken. The works survey van continued to patrol that night and the following day. By the morning of 11th October, it was decided that water would have to be used and it was turned on with all factory labour under cover at five minutes to 9-0 a.m. From ten o'clock the fire began to subside and as the pile cooled the police were stood down. Water was used for twenty four hours and by the afternoon of 12th October the pile was cooled and the accident as such was over.

As far as the community outside the factory was concerned it became clear later that meteorological conditions were of great importance. At first the ground wind was off'shore-north-east to north-north-east, but during the night it strengthened and blew down the coast north-west to north-north-west throughout the day of 11th October. Later it changed to south-west and the fall-out pattern is still further complicated by the fact that at the time of the emission winds above an inversion some hundreds of feet above ground were blowing in a different direction.

There were three hazards to consider, whole body radiation, inhalation, and ingestion. The Health Physics manager appreciated, and the Medical Research Council have since endorsed his decision, that the first two hazards were likely to be well within acceptable limits and that the ingestion of contaminated food would present the main problem. At first it seemer that the whole range of fission products in normal proportions had escaped from the top of the stack and in this case the risks would have been many and varied. A biological survey was mounted and at noon on 12th October the first analysis of radioactivity in milk showed a far higher proportion of iodine activity than would be expected from normal fission products. This could only mean one thing, that vapourised radioactive iodine had escaped through the stack filter and that the filter had caught the major part of the particulate matter. It was now clear that a major problem would arise from the milk of cattle grazing on grass contaminated by radioactive iodine. This fortunately is a relatively short lived isotope with a half life of eight days. Prior to this incident there was no established tolerance level for radioactive iodine in milk. It had, however, been suggested in a scientific paper that 0.39 microcuries per litre was a level above which radioactive iodine in milk was likely to be a hazard to infants. The early milk analyses were within these safety limits, but when on the afternoon of 12th October an analysis of the Seascale morning milk showed 0.8 microcuries per litre, the Health Physics manager advised that the continued distribution of milk gathered from the immediate vicinity of the Works could be dangerous to small children. Consultation followed to establish a level beyond which milk should be taken out of distribution and, on an assumption based on the worst possible case for absorption into the thyroid gland of a young child fed exclusively on cows milk, a figure of 0.1 microcuries per litre was taken as the deadline for action. A final decision was reached at 9-0 p.m. on 12th October and arrangements were made locally with the Cumberland police who consulted the Clerk of the Cumberland County Council, the County Medical Officer, the District Medical Officer of Health, and the Milk Marketing Board, to prevent milk delivery from twelve producers within a two mile radius of Windscale that night. During the next two days milk samples were taken from farms at increasing distances from Windscale and as the results became available the control area had to be extended until by the 14th it covered a coastal strip thirty miles long, ten miles broad in the south, and six miles broad at the north

end. The southern boundary included the Barrow peninsula and the northern six miles north of Windscale. In addition to iodine, other radio isotopes, notably strontium 89, strontium 90, and cresium 137, are potential human health hazards. Many analyses were carried out on all kinds of food for these other radio isotopes and it was confirmed that the problem centred on radioactive iodine in milk only. It was decided that there was no need to forbid the use of locally produced food, such as vegetables, eggs and meat, and no restriction was placed on drinking water. The control area for milk was reduced in size on 31st October. There was a further partial de-restriction on 4th November and finally all restrictions were removed on 23rd November, 1957. The Medical Research Council Committee on the Health and Safety aspects concluded—"After examining the various possibilities we are satisfied that it is in the highest degree unlikely that any harm has been done to the health of anybody, whether a worker at Windscale or a member of the general public". In fact at no time during the accident was there any hazard outside the factory from external radiation or from inhalation, and no specific action in this direction by the public health service was necessary. Had a need arisen there was a prearranged plan by which the police, who had already been alerted, would have notified those concerned with action, including the County Medical Officer and the District Medical Officers of Health concerned. On 12th October when the milk decision had to be made, the County Medical Officer and the District Medical Officers of Health were consulted.

The report of the committee appointed by the Prime Minister to examine the organisation for the control of health and safety in the United Kingdom Atomic Energy Authority, makes official mention of the Windscale Liaison Committee on which is represented all interests in the area. This Committee is kept informed of the present position and the future programme at the works and over a period of time will visit plants and acquire a general knowledge of the site and processes. In 1954 a plan for a district emergency was agreed between the appropriate officers of the Cumberland County Council and local officers of the Atomic Energy Authority at Windscale. At no stage during the events in October did it become necessary to put this plan into operation. The plan appeared to be in general satisfactory and it is to be modified in the light of experience by a sub-committee of the Windscale Liaison Committee which has been set up to evolve a district emergency scheme which would come into operation in the event of another incident.

THE WELFARE SERVICES

It will be recalled that the County Welfare Officer (Mr. Walker) in his supplement to my report for 1956 said in effect that the multifarious Welfare etc., Services under the National Assistance and other Acts, were so firmly established

and progressing on well defined lines, that there was little change to record from year to year, and that subject to the submission of a full and comprehensive report covering all sections of the services every second or third year, intermediate reports would be limited to comment on any matter of special interest.

In accordance with that policy I am indebted to Mr. Walker for the following report for the period to the 31st December, 1957, on the welfare services, the administration of which is in the hands of the Welfare Sub-Committee of the Health Committee.

National Assistance Act, 1948

In the Welfare Services Supplement for 1956, reference was made to (a) the restrictions and/or limitations imposed by the Government on capital expenditure which were unfortunately delaying approved developments in the erection of

(i) new residential homes in Maryport and Workington, and

(ii) a social/handicraft/recreation centre in Workington for handicapped persons—a pilot scheme for the County—and

(b) the inability therefore to offer comment on the advantages which would thereby have accrued to the County Council and the persons for whom the services are being provided.

Similarly, progress in the development of domiciliary services for handicapped persons (home bound and otherwise)—many of which services are of a permissive nature but nevertheless essential if practical effect is to be given to the Council's approved scheme—could proceed only on cautious lines and within the limits of approved expenditure, pending advancement of the services on the lines now so strongly urged by the Ministry of Health.

In the circumstances as detailed in (b) above, and instead of repeating in each year's supplement much of what is commonplace knowledge, it was suggested that a full and comprehensive report should be issued every second or third year outlining, in greater detail and with appropriate contrasts where possible, the services existing at the time, coupled with individual improvements and advances—section by section—over the previous 2/3 years, comment in intermediate reports being limited to any item of special interest.

Residential Accommodation

Whilst there has been no general withdrawal of the capital expenditure restrictions during 1956/57—the period covered by the County Medical Officer's report—the various welfare etc. services, so firmly established in principle and on

well defined lines, have continued and progressed in accordance with the provisions made in approved estimates, and it is pleasing to record further upgradings in residential accommodation and facilities at the three Joint User Establishments (Penrith, Wigton and Whitehaven); maintaining, and in some cases improving, the standards and amenities of modern type homes, i.e. such as, for instance, the installation of a passenger lift at Garlieston; and to the opening in March, 1958, of the new home at The Croft, Kirksanton, which provides residential accommodation in the southern part of the Administrative County for 18 aged persons (9 males and 9 females). The Croft is indeed a very pleasing home, and its convenience, facilities and amenities for the aged residents have been the subject of commendable observations from many sources.

Whilst on the subject of residential services—i.e. provision of homes—it will be of interest to members of the Council to note that at the end of 1956 and since the end of the war, Local Authorities in England and Wales have opened 928 new homes for the aged and infirm (including the blind) in need of care and attention, representing bed provision in a modern type home for some 27,850 residents. Seventy-eight of those homes were of new construction. The number of homes opened during 1956 was 73, of which 22 were purpose-built with accommodation for 35 to 40 residents in each. In the Ministry of Health's last report (i.e. 1956) it is stated that progress in the development of new homes by Local Authorities is, for the time being, governed by the extent of borrowing which can be permitted for capital projects following the Chancellor of the Exchequer's announcement in February, 1956, of restrictions in Local Authority capital expenditure.

The report states that the effect of that restriction in terms of additional beds was not yet apparent, in that the homes opened in 1956 represented almost entirely new schemes approved and buildings started before the restrictions were imposed. In allocating the amount available through loan sanction issues for financing new homes, preference was given to Local Authorities whose need for additional accommodation was most urgent. That policy inevitably made long-term planning more difficult, for at the time when a major project is decided upon and sketch plans are prepared, it cannot be seen when loan sanction can be sponsored. That position is particularly applicable to Cumberland, in that whilst plans and estimates for the erection of a new home in Maryport have been approved by the Ministry, loan sanction is still awaited.

Short Stay Homes

The Ministry's report also makes reference to the fact that an increasing number of Local Authorities recognise the importance of providing for the temporary care of very aged and infirm people in order to give a period of relief to the relatives

who normally carry that responsibility, and the observation is made that the usefulness and indeed far-sightedness of making such a provision was brought out by the Ministry's "Chronic Sick" Surveys.

It will be recalled that such a scheme was advocated for Cumberland and approved in principle as far back as 1951, when estimates were submitted as to the number of aged, infirm and handicapped persons for whom residential accommodation would be required, it being then indicated that on a long term policy something like 13 modern type homes together with a "Short Stay Home" would be necessary to give reasonable cover for Cumberland's aged and infirm population in need of care and attention.

The establishment of a "Short-Stay-Cum-Holiday-Home" at The Towers, Skinburness, is now proceeding to completion and it is hoped that the home will be in full occupation by the early summer of 1958.

Handicapped or Disabled Persons

With intensive concentration on the needs of the aged and handicapped, a great new range of services has been opened, and is being built up, so much so that there can be no slackening off in the effort—the reverse is the case—in that more residential accommodation of the modern type is needed and there must be a more realistic appreciation of, and progress in, that side of the welfare services dealing with the handicapped classes and more especially the home-bound.

As regards services which local authorities have power to provide under Section 29 of the National Assistance Act, the Committee of Inquiry on the Rehabilitation, Training and Re-Settlement of Disabled Persons said that there is a need for fuller and better provision and scope for considerable development by way of

(a) Increased provision for day clubs or centres for the handicapped. (N.B. This is similar in fashion to Cumberland's Pilot Scheme to be established in Workington, and which is now awaiting loan sanction).

(b) A wider provision of occupational homework.

(c) The supply of personal aids and alterations to disabled person's homes.

(d) The establishment (when necessary) of Hostels for handicapped persons whose home conditions are unfavourable or for whom suitable employment cannot be found in their own areas.

(e) Experiments in the provision of Hostels for convalescent mental patients while undergoing industrial rehabilitation or training.

(f) The introduction of Short Stay Hostels where the needs of disabled persons would be considered in the same light as those appertaining to the aged.

(g) Co-operation between the Welfare Department and general practitioners, and the importance of close contact with the Youth Employment Services in the case of disabled school leavers and other young disabled persons.

(N.B. So far as Cumberland is concerned, this suggestion and recommendation is already in hand via the Consultative Panel, which consists of representatives from the Education and Health Departments, Ministry of Labour, National Assistance Board and other interested Departments).

On the assumption that the Local Government Bill is enacted in substantially its present form the Government have decided that a measure of assistance should be given, through the general grant, towards the expenditure of local authorities in developing their services in future years, and an appropriate allowance for this purpose will be included in the amount of the general grant for the first grant period starting in the year 1959/60. In a recent circular the Minister of Health states that whilst appreciating that the development of Section 29 services must have regard to current financial considerations, he feels sure that the decision regarding financial assistance, via the general grant, will encourage local authorities to proceed, as opportunity serves, along the lines endorsed by the Special Committee.

Standard of Services and General Situation.

During 1957 there has been no falling off in the standard and value of the services provided—in fact the opposite is the case—the Welfare Sub-Committee having continued its policy of improving residential services and extending within the limits of approved estimates the scope of welfare services for the blind, deaf and dumb and handicapped persons of the residual classes, matters which have been reflected in and through the Committee's minutes.

Stated briefly then the position in Cumberland during 1957 was much the same as in the previous year. The main services consisting of—

(a) Part III Residential and Temporary Accommodation.

(b) Medical attention and treatment of the chronic sick.

(c) Old People's Welfare and Voluntary effort.

(d) Services for the blind, deaf and dumb—Agency arrangements.

(e) Other handicapped persons—local authority services in conjunction with the Ministry of Labour and National Service.

(f) Reception Centres for persons without a settled way of living.

have continued on well defined lines of policy and in close co-operation with other Committees of the County Council and National Services. Day to day administrative

arrangements have proceeded smoothly and efficiently, notwithstanding the fact that these social services, unlike those of a non-personal nature, call for close and careful attention individually, and immediately, if the best interests of the individuals are to be provided for, which must be, and is, the one and primary object of the various Welfare Sections of the Act.

Temporary Accommodation.

Regarding (a) in the preceding paragraph it would not be inappropriate to make reference to the matter of "Temporary Accommodation" in that there is a duty on the County Council to provide such accommodation for persons who are in urgent need thereof, being need arising in circumstances which could not reasonably have been foreseen or in such circumstances as the Council may in any particular case determine.

In Cumberland, and excluding at the moment the possible need for the temporary accommodation of persons made homeless through fire, flood, etc., requests for such accommodation arise mainly in the case of squatters; families evicted from condemned properties; and unsatisfactory tenants due to non-payment of rent, unhygienic household conditions, etc.

Due to the absence of facilities for such accommodation at Highfield House, Wigton, and Station View House, Penrith, and the unsatisfactory accommodation and conditions associated with Meadow View House, Whitehaven—a place totally unsuitable for instance for children—Committee approval has been given to the re-conditioning of 5 huts on the Calthwaite site for use as temporary accommodation under the control of the Warden of the Reception Centre. The scheme is subject to the Ministry of Works and the National Assistance Board agreeing to rent the huts (Government property) to the County Council for a reasonably lengthy period and at a suitable rental having regard to the capital expenditure which would be involved in adaptations. The latter issue as to tenancy and rental is under negotiation, and as soon as agreement is reached the scheme will be submitted to the Ministry of Health for approval and the issue of loan sanction.

If the scheme goes forward it will provide a measure of accommodation for homeless or evicted families and where the families can be rehabilitated instead of separated; where the housewife can be given personal guidance and supervision in the running of a home, in cooking and in cleaning; and above all in personal hygiene, self-respect and independence.

The only difficulty foreseen at the moment is that any work in the direction of rehabilitation may be hampered by the inability of housing authorities to guarantee housing or re-housing of those families who do respond satisfactorily in their

temporary environment, and this more so in the case of families who have been evicted from Council and other houses in districts outside the area in which the temporary accommodation is to be provided.

Where eviction is threatened there is still co-operation between my department and housing authorities in an effort to avoid the evil day, and in many cases there have been successful conclusions to our joint efforts, especially in cases for instance of arrears of rent only. Additionally, there is full co-operation between my department and the N.S.P.C.C. and where the assistance of the Society's Woman Officer has been most valuable in the staying and warding off proceedings for possession. It can be said, in passing, that the completion and availability of the scheme, now approved in principle, will materially strengthen the administration and services necessary to rehabilitate the kind of persons for whom the scheme is being introduced.

The Welfare State—10th Anniversary.

July 1958 will mark the tenth anniversary of the coming into operation of the National Assistance Act, 1948, the general object of which was to substitute for certain services as then existing, a comprehensive scheme of assistance and welfare services which would complete the main pattern of the new social legislation of which the Family Allowance Act, the National Insurance (Industrial Injuries) Act, the National Insurance Act, and the National Health Service Act were other principal features.

One fundamental object was to achieve the final break-up of the poor law and the creation of entirely new services founded on modern conception of social welfare, and the passing of the tenth milestone will be a matter mainly for comment and comparison in the full and comprehensive report which will be submitted as a supplement to the County Medical Officer's report for 1958.

Civil Defence

Issues connected with Civil Defence and in particular those relating to the Welfare Section continue to receive considerable attention. Progress continues to be made in the training of volunteers, the ultimate aim being the building up of Rest Centre teams to adequately cover the administrative county.

General.

In concluding this short and intermediate report for 1957, I would like to express my grateful thanks to members of the County Council, and especially to the Chairmen and members of the Health and Welfare Committees and the various House Management Committees, for their great interest and help in the advancement and expansion of the welfare services as a whole, and to record my appreciation of the efficient co-operation and help from other departments and particularly so by members of my staff.